

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 633:

	GCTGACATAA TTGCATCAAA TTTCACATCC CCATAAAAT CGCTACCACA TAACCTACGA	60
5	TAATACCTAC AAGAACTGGA ATTAAAGATA GGAATCCTTT AAAAAATCCT TGAACGACTA	120
	TTGTTACAAG CAAGGTTATC ATTGCAACAA TTAAGAACT GATATTGTAA CCTTTCATAT	180
	CTCCAGGATT TTCATACATT GCCATATTGA CTGCAGTAGG CGCTAAGCTT AAACCAATTA	240
10	CCATGATGAC TGGTCCAACA ACAACTGGTG GTAATAATTT CATTAAACCAT GCTGTCCCAC	300
	TTAATTTGAT TAGAATCCCG ATGATGACGT ACATAACACC ACTCATGaAT AATGCTACAA	360
15	GCATGTCTCC TAAGCTATGC GTACTTAATC CCGTGATAAT TGGCGTGATA AATGCAAAGC	420
	TAGATCCCAA GTATGCTGGT ATTTGCGCCT TCGTTATTAA GATATAAAGT AATGTACCGA	480
	TTCCCGAAGC TAGTAACGCT GCTGATATTG GTAGTCCTGT TAAGAATGGT ACTAGTACTG	540
20	TTGCGCCAAA CATCGCAAAT AAATGTTGTA AGCTTAAAAA TGCCCATTGC GCTGGTTGTG	600
	GTTTTTCATT TACATCTAGT ACGGGTTTTA CTGTTCTGTC AAACATTTCA TCATTTTGCA	660
	TAATATTCAT TTCCTCCGAT AATAAAAAAA TCTCTTTACA TCAGTATATG TAAAGAGACA	720
25	AAAAGTGTGA CAAGTTGCTA CAAGTCATTT TCGTCCATAG AAATTGACTT ATAGTTGTCTG	780
	AACATGAGGG TATTATTAGA TAAACAAGCA TATGAAACT TATTTATCAT TCAACTCCCC	840
	CACCTTTTTT AGTCTCTCGT ACTGAATTAA AAGGGGtATT ATTTAATTAT AACTGCATTT	900
30	CTTTGATCca TTtCTTCyAA ATAGACACTT ACCGTTTCCT CTTTAGAAGT AGGTawATTT	960
	TTACCAACAA AATCTGCTCG AATTGGTAAC TCACGATGTC CTCGATCAAC CAAAGCAGCT	1020
35	AAACCAATTT TAATAGGTCT AGCATTTAGC AAAATAGCAT CAAGTGAAGC ACGAACC GTT	1080
	CGACCAGTAT ACAGCACATC GTCAATAATG ATGACTACTT TATCTGTAAT ATCTGTGTCTG	1140
	ATGTCTATTG CGTCTTTTGT CGTAAGTGAT GACATGTGcT CTATATCATC TCTAAAGTAT	1200
40	GTAATATCAA TTGTTCAGT AGGTATACGT TGTGTCTCAA TTTGATGAAT TTtATCTTGT	1260
	ATACGATTCTG CTAAATATTC ACCTCTTGTh TTGATACCTA AAAGATTAAA TTATCAGTAC	1320
	CTT	1323

(2) INFORMATION FOR SEQ ID NO: 634:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 761 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

ACCCATCTCA TCGTATTTTG AATTTAATAG ACGAGATCGA TGTATATCTG AATTCATCCC 60
 AACTATGGAT TAATGTTGGT ACATCATtAA cGCATAACCA ACATTTTGAG CAGTTGTTTT 120
 5 ATAAGTAACG TGATTTTTAT CTAATTGCCC TCTTAATGCG TCCTCTGTAA ATTCAACACT 180
 ATCAGAACCA TTAGAGGTCG CTTCAATATAA GTTATTAGAT GCAATATGTG CTAAATCGCT 240
 ATTGATTTTC AATGGTTTTA ATCCTTTTAA TTTTCTCATT TCATTGCTTA CTTCATAAAG 300
 10 AGAAATTAAT TGATTTGGAT TTTGCTCAAC TGGACGCTTA TTATGCTCTT CTGACGTAGA 360
 ATTAGAATT AATTGATAAG GTTCAATATC TGCTAACATT TCTTTTGTTA AAAATCGTAC 420
 ACTTAGCACC TTTTTCGATT GTTGATCAGA ATACACTTGT GCATATATGT CGCCATATTT 480
 15 AATCaGTGTT TGTGTTTTTA AATCTTCATC TGAAAGTTCA AATTCATATT TTTTACCATC 540
 AACTTTAAAG GACGGTTCTG GATTAATACT TGTATGATTA AAAATTCTG CAGAATGTTG 600
 20 TCCTATTTTT AACGGACTAA CATTGACTTT CTCACCTGTA GCATACACTG AAACGATTTT 660
 TTCAGTTTFA GTTGAAACAA TGTAATAACT GTTTTGTCT TTAAACACAT AATTTTTGTA 720
 rCCATCTCTA AAAGGGTAGA CrCGATCTGC TTGTCCAAAT T 761

(2) INFORMATION FOR SEQ ID NO: 635:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 827 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 635:

nTAAATATAT TTATATATTA TAGAATAGAA AGACCTGAAG ATTGAATATC TTTCGCAAAG 60
 CCTTTAACTG TATCTACTGA TAATTCGTTA ATATCGCGAC CTAAGTTTGT ATTCACTTTT 120
 40 TTCACAACAT CTGCTGGGCA TGTAATAATA TCTGCACCAA TTTCATCAGC TTGAATCACA 180
 TTGAATAATT CGCGGCAACT TGCCCATAAT AATTTAACGC CGTCTTTACT ATGCGTAACT 240
 TTnACAGCCT CTkTCATTAA TGGTaATGGA TCTACGCCTG TAtCTGCAAT ACGTCCTGCA 300
 45 AATACTGAAA CATATGTTGG CACACCTTCA GTTACTGCTT CAGTTATTTT TTAACTTGT 360
 TCAATTGTGT AAACAGCCGT AACGTTTAAT CTCACATTGT CAGCTGAAAG TTTTTAATT 420
 AAAGGAATCG TTGATTCACC TTTTGTATTT ACAATAGGAA TTTTAACAAA TACATTTTCG 480
 50 CCATATTGTT TTAAAATTGC TGCTTCTTTk TCCATAGTTT CTAAATCGTC TGCAAATACT 540
 TCAAATGArA TTGAAGCATC TGGAATTCTT TTCACAGCTT CTTCAGCAA AGCTTTGTAA 600

TTTTTATAAG CTGCTTTCAT TnCTTCAATA TCTGCACCGk CCGCAAATAC TTCTACATTT 720
 AGTTTAGCCA TATAAyATAG CCTCCTTGAT TCTTATTAAA ATTTTAACAA CATCTGCATG 780
 5 KCTTTTCTT ACAACCATTG GTAAAAAATG ATTTTATTT CTTtGTT 827

(2) INFORMATION FOR SEQ ID NO: 636:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1478 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 636:

TTAGTCGGTA TAACCATCGG CTAGGTGGTT TTTGTATTAA AAAAGTGGAT aCCAAAATTT 60
 20 ATTAATAATT ATTTAATGT TAGAAAAAAA CTAAATAAAA ACTCGCTAAT GATATCCAAT 120
 AATATGTATA CAAAACGAGA CATATATTGC ATATGATTAA CGAGATACTG AAAATATTTT 180
 ATCACCCCTA AAATGATTAT TCATTTTCAG CGGTAATTCG ACCTAAAGTC AAACCTACAA 240
 25 TAAAACCGAT GATAAATACT ACTAATGAAA CGAACCACAT CACGATATTA GTTGGTAAAC 300
 CTGGAATAC TGCAAAGAGG GAGCCAACAA CAAAACCAAT GATTAATGCA AAAGTCATTA 360
 GTTTATGATG TGTTAGGAAA TACTGGATAA TTTTGCTTGA AATAATGAAT CCAGCAAGCA 420
 30 CGCCAAATCC GACTGCAAGT AATATAGGAA GACCTGCAAA GTTAAGTTTA ACAACTTCAG 480
 ATATTGCTAG CATGACCGTA CCATAGACGC CAAATACTAA TAACATAAAT GACCCTGAAA 540
 35 TACCTGGGAG TAACATAGCA CTAGATGCAC ACATACCTGC AATAAAATAT TTAATAATAA 600
 GACTAGTTGA TAGAGTAAGT GTTCTCCAG CATGTTTATC ACCATTATTC ATTAATGTAA 660
 TAACAATTAA GATAGCGATA CCAGCTATAA CCATCATGTA ATGTYTAGTT GTAAATGACG 720
 40 TTTTATAGTT AGAAATTTTC AATAAATATG GAACGATACC AATGATTAAT CCACCAAAGA 780
 AAAACATAGT TGGAATATGG TGTGGCTTA ATAAATAATT AAAAAGATTA CTTAGTGATC 840
 CCATTGCCAG TAACATTCCA ATTATAATGG GGATTAAAAA TGTAAACTT GGCCAAAAAC 900
 45 GTCGTGAGAA TATGCCGCTA ATTGAAGCGA TAAATTGATT GTAAATACCT AACATAATG 960
 CGATAGTCCC ACCGCTAACA CCAGGTACCA AGTCACTCGT TCCCATAGCA AAACCTTTTA 1020
 GAATATTAAT CCATTTAAAT TGTGTCATGA ATAACCTCTT TCAAACGATT GGAATAAAAT 1080
 50 CATAAATAGC ATCATACCAT ATTACAAATG TCCTAGTGAA ATGATAACAT ATTTTAAATT 1140
 CATAAATCC ATTGAGAAAT TATGTGCACT TATTATCATT TATATTTTAA AAGAGAGCGG 1200

AGGTATAAGT AAGTTATAAT TAACTGAACG CATTATTACA AAGTCTTTTT GACTACAAAT 1320
TAAAATTATT ATAAACTAGT TAAGAAAAC TATATTTTA CGGAGGGAAT ATAAAATGGC 1380
5 ATCAACATTA GAAATyAAAG ACCTACATGT GTCTATTGAG GATAAAGAAA TCTTAAAAGG 1440
TGTTAACTTG ACAATTAACA CTGATGAAAT ACATGCCA 1478

(2) INFORMATION FOR SEQ ID NO: 637:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1995 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 637:

20 ATTACAGCAT CTTCTCTAGG TAGATTATTA AAAGATAGAG GTCTAAATGT AACAAATTCAA 60
AAATTCGATC CATACTTAAA TGTTGACCCA GGTACAATGA GTCCTTATCA ACATGGTGAA 120
GTATTCGTAA nGGATGATGG TGCAGAAACT GACCTAGACT TAGGACATTA CGAAAGATT 180
25 ATTGATATTA ATTTAAACAA GTTTTCAAAT GTGACAGCCG GTAAAGTGTA TTCACACGTA 240
TTGAAAAAAG AACGTCGTGG TGATTACTTA GCGGGAACAG TTCAAGTTAT TCCGCATATT 300
ACAAATGAAA TTAAAGAACG TTTATTACTT GCAGGGGAAA GTACGAATGC AGACGTTGTT 360
30 ATCACTGAAA TTGGCGGTAC AACAGGTGAT ATTGAGTCAT TACCGTTTAT TGAAGCGATT 420
CGTCAAATTC GTAGCGATTT AGGTAGAGAA AATGTTATGT ATGTTCACTG TACATTACTG 480
CCTTATATTA AAGCTGCTGG AGAAATGAAA ACGAAGCCAA CACAACATAG TGTTAAAGAA 540
35 TTACGAGGCT TAGGTATTCA ACCAGACTTA ATCGTTGTAA GAACTGAATA TGAAATGACA 600
CAAGATTTAA AAGATAAAAT TGCATTATTC TGTGACATTA ATAAAGAAAG TGTATTGAA 660
40 TGTCGTGATG CAGACTCTTT ATACGAAATT CCATTACAAT TAAGCCAACA AAATATGGAT 720
GATATCGTTA TTAAACGTTT ACAATTAAAC GCGAAATATG AAACACAGCT TGATGAATGG 780
AAACAGTTGT TAGATATCGT TAATAATTTA GATGGTAAAA TTACAATTGG TTTAGTAGGT 840
45 AAATATGTTA GCTTACAAGA TGCATATTTA TCAGTTGTTG AATCATTGAA ACATGCTGGA 900
TATCCTTTTG CCAAAGATAT TGACATTAGA TGGATTGATT CAAGTGAAGT AACAGATGAA 960
AATGCAGCCG AATACCTTGC AGATGTCGAC GGTATTTTAG TACCAGGTGG ATTTGGTTTC 1020
50 CGTGCAAGTG AAGGTAAAAT TAGTGCAATT AAGTATGCTA GAGAAAACAA TGTACCATT 1080
TTTGGTATTT GTTTAGGAAT GCAACTTGCA ACAGTTGAAT TTTCAAGAAA CGTATTAGGC 1140

TTACCAGAAC AAAAAGATAT CGAAGATTTA GGTGGTACAT TACGCTTAGG CTTATATTCA 1260
 TGTTC AATTA AAGAAGGCAC ATTGGCACAA GATGTTTATG GTAAAGCGGA AATTGAAGAA 1320
 5 AGACATCGTC ATCGTTATGA ATTTAATAAT GACTATAGAG AACAATTAGA AGCAAATGGT 1380
 ATGGTGATTT CTGGTACAAG TCCAGATGGA CGTTTAGTAG AAATGGTAGA GATTCCGACA 1440
 AATGTTCTT TATTGCTTGT CAATTCCACC CAGAATTCCT ATCTAGACCA AATCGTCCGC 1500
 10 ACCCGATTTT TAAATCATTT ATTGAAGCTT CATTAAAATA TCAACAAAAT AAATAAATTT 1560
 GCTAATAAAA CCGGTACTTT CATTGT TAAA CATTGAAAGT ACCGGTTTnT CGTATAATTT 1620
 15 TAATATTATG TTAGTGACAA GGTATGAAAT AACAATAGTG ACTTTTATAA TTCTAAGTCT 1680
 CTGTTCATT CAATCATTG TGTATAAATG TCATAGTATA CATAATTCAA TGCCATCGCA 1740
 TGTGGTyGGA CAATCTTATC GTAATCTTCA GTGTAGACTA TAGGTCTTGG TGTAGATAAA 1800
 20 TCGATAAAAT GTACGAGATG ATCAGGGAAA TCATCTGTTT TAGGTTTGTT GCTTATTAAG 1860
 ACCACATCGA TATCTAAGTC GATAAGTTTT TGAATATCTA ATGCAACTTG ATyATTATAA 1920
 AATGGTGCGA ATAATAATAC ACGATCAGTT GAGTCAATTT CTTTAAwkTC TTTAATAGCG 1980
 25 TaAGTTTnCG GCTAG 1995

(2) INFORMATION FOR SEQ ID NO: 638:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1107 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 638:

ATTAGTGATG AAAGTCAGAT TGAAGCTTTA TTAACAGCTG AAAAATATTC AGAAATGATT 60
 40 GGTGAATAAT CACCGTGTA CTCCTTAATC TAAGATTGAG GAGTTTATTT TTAGTCTGAG 120
 AAAATAAATG ATATGAAAGA AAAATTATTA GGTACTATTA TTTGGAGTAT TGCTACATTT 180
 45 TATTATTCAA GAATGATGGA AATAATGAAT TTAGCTATTT TAAAAATAAA AATTGGGGGA 240
 AGTTAATATG CTAAACATTC AAGACGTTAn CATnCTTTCT AAAAAGGAGC AAAAAGCATA 300
 TAACCGTTTC GTAGAATCTG TAGAAAACGG TAATTTACCA GTACTACCAT GTATTGAAAT 360
 50 GGATCTAAAA GAGATGCAAG AAGAAACATT AAACCAGAGT AAGATTGGTG GAATGCCATT 420
 TTTAAATCT TTTAAAGATA TACCATTAGA TGAAAATAAT GTACCAATGG TATTGCTAGC 480
 ACAGATTAAT TTGGATGATC TTCCAGAACA ACAAGAATTA TTTCTGTAA AAGAAGGGAT 540

AAACAATATA AACTCAAGGC TTGTTTATAT AAAAGAGCCA ATTACAGATT TATCACTCGA 660
 AAATATTCAA GCGCATTTGA AGTCATTAGA TGCTGATAAT GAGGATATCC CGTTCAGTGG 720
 5 AGCATTCTTCT ATAGAATTTA GATTGTGCGAA ACAAACCTATT ACATGTACTG ATTATAAGTA 780
 CGATGAGGAC GTGCTTGCAT TGTGGAATAA AGTCAATCCA TCCTTCGCGC TAAAATCAAT 840
 GTTTGGTGGT TATGATGAAT TGATGGAACC TGTGTGTAmC AywTTTACTG CTAAGgAACC 900
 10 ATTTAATCAA CTTGGTGGTT ATCCATATTT TGACCAAATA GATCCAAGAA CGAACGATCa 960
 AGAACTGAAA ATGTATGATA GAGTCTTACT GCAAAATTGaT TCTACAAGAG ATGGTAATTC 1020
 15 TTCGATTATa TGGGGTGaTT TAGGTATTGc CAATATCtTA GTGaAATCTA CTGrACCTTG 1080
 aGGcTAtGaa GTTTTGAATG ATTACCT 1107

(2) INFORMATION FOR SEQ ID NO: 639:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 904 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 25 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 639:

30 ATTCATATTA TTATAAATTA TTTCTACACC ATCCCAATTG AGTTGTTTTT CATAATTTAA 60
 ATGTAATTCC ACTAACTCCC TACCAATTTT AACAAATCCA TATACATCCT TTAATATCGG 120
 TATTCGCGGA AAACCTTTAC TCAAATCACT TGAATATTTG TTCACATAAT ATTTATGATG 180
 35 CAAAATTGCA TATATATAAT ATACTATCTC TTCTGAATTA AGATTTATTT TCTTTTTTAA 240
 AGAATTAGga AATATTATCT ACArGCCTCA AACTATCTTT ACCTTTGtAT GTAGCAAAGC 300
 CTTkGCCATT ACCAATAAAc TGGAAATTAG GTAATATGTC CGTGATCATA GCCGAGAATT 360
 40 CTTTATTTCAT TCCCTGTCTT TGTATATAAA TCACCTGTCC AGTATTCTCC ATTATATTAT 420
 AATATCTACT TGGCATTTC ATAAATATTT TGTCGTACAC TATCCATTTT TTTGTAAATG 480
 GTCTATGCAT AAATTTAACA ATTCTCTCTG GATTAATTGA AATATTTTTT CTTTAGAAA 540
 45 ATTTTTGGGT AAGTCTCGT GTCCAACtaA TaAATGTTTC ATCTTTGTTT ACTAAATTTA 600
 TACGTTCTCT TGAATCTAAG ATATCAATTA ATCTATCTAT TTCAGAATTA TAGTTATCTA 660
 50 CAAGTAATTT TGcATTACT AATGCTTTTT CATTCGAAAA ATTTGTTACC CAATTATCTC 720
 TTGCTGaATT TACTCCATTA AATkGakCTA AATATATAGA ATTTTCAATA TCCTTGAAT 780
 CATACATTGG TAAATAATTC CCCATAGTTT ATGTCTCGGT GATTAATCCA ATCATTGGGG 840

AAAG

904

(2) INFORMATION FOR SEQ ID NO: 640:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 436 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 640:

CGATGTCTTT ACTATTAGAC TTAGCCATTG GTTTCACCTC TCCAAAAATT GTAAATGTGT 60
 ATCATCAATA TGAAAGTTAC ATAAACTGA CATATTTCTT TAAAATATCA ACGCCATTGA 120
 TAACTTCCTG TTTTAATTGA TACGCTGTAA CAAAATACTA TAGTTAGTGC TTACATGTAT 180
 ATGTTAAAGC AAGCAGTGGT AAATGTAAAT TATAATTATT CATTAACTTT GCAATATATT 240
 AAATCTTTTA TTCATAGAAG ATAAATATCA AATCAATCAT AATTATTTGA CAACAAATAG 300
 CTAACGATTG TTTTAATCTA CATTGGCTT ATAGCATTTT AACCTATAC TCTATTTTGA 360
 TACAATATAA GTGTAAATC AATCATAAAA AGGATATTCA ATATCTGCAT CCAAGAAAAA 420
 CATTACAATT ACCTTT 436

(2) INFORMATION FOR SEQ ID NO: 641:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 442 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 641:

GTTATTAAAT TCAGAGTGGT AGCAAATTAA AGTTANTCAA GAGTTAAGAT GAATTTAATT 60
 CATGAACACG TCTATTATTT TTATAATTGT AGCAAATAAA GCTTTACATC AAGGAGGTAA 120
 TTAAATATGT TCAAAAAATA TGA CTCAAAA AATTCAATCG TATTAAAATC TATTCTATCG 180
 CTAGGTATCA TCTATGGGGG AACATTTGGA ATATATCCAA AAGCAGACGC GTCAACACAA 240
 AATTCCTCAA GTGTACAAGA TAAACAATTA CAAAAGTTG AAGAAGTACC AAATAATTCA 300
 GAAAAAGCTT TGGTTAAAAA ACTTTACGAT AGATACAGCA AGGATACAAT AAATGGAAAA 360
 TCTAATAAAT CTAGGAATTG GGTATTATCA GAGAGACCTT TAAATGAAAA CCAAGTTCGT 420
 ATACATTTAG AAGGAACATA CA 442

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 2472 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 642:

CCAATTTTGG TATGAATTAT ACAGATAATT CnGCGCCCGG AGGATCATT T GCTTATTTAA	60
ATCAATTCGG TGTGGATAAA TGGATGAATG AAGGGTATAT GGCATAAGGA GAACATTTTA	120
ACTACTGCCA ATAACGGAAG ATATATTTAT CAAGCTGGAA CTTCATTAGC CACACCTAAA	180
GTTTCGGGAG CACTAGCTTT AATCATTGAT AAATATCATC TTGAAAAACA TCCAGATAAA	240
GCGATTGAAT TGTTATATCA GCATGGGACA TCTAAGAATA ATAAACCATT TAGTAGATAT	300
GGGCATGGTG AGCTTGATGT GTATAAGCA TTAAATGTAG CAAATCAAAA AGCAAGTTAA	360
TAAATCAAAG GAGTTTTTGA TTATGGCAA ATTAGTTACT GAAAACATT CGAAGCGGTT	420
TAAAAATCAA GATGTATTAA AGCATATTAA TATCACTTTA GAAAATAACG AAGTTTATGG	480
ATTACTTGGT ATTAATGGAG CCGGTAAAC GACACTTATG AAAATTATAT GTGGCATACT	540
TCAACAAGAT TCAGGGGAAA TTAAATTAGA TAATAGACCA ATGACACGAA ATGATTTGCA	600
CAAAGTTGGT TCGCTTATTG AAACACCTGC GACATATAAT CATTTAAGTG CACAAGATAA	660
TTTGAAAAATT GTGTGTTTAA ATGAAAGCGT TGATTTCaGC GAAATTAATA GTGTTTAAAG	720
CTTAGTCAAT TTAAATGTCG ATAAAAAGAA AAAGGTTAAG GACTTTTCTT TAGGTATGAA	780
ACAAAGACTT GGAATTGCAA TGGCaTTAAT TAAAAaGCCA GAAATTTTAG TATTAGACGA	840
ACCATCTAAT GGTTTAGACC CATATGGAAT CCAAGAACTT AGAGAACTTC TAAATTTATT	900
AACAGAACAA GGTACTAGTA TTATTATTTC AAGTCACATT TTATCTGAAA TCCAAGTTTT	960
AGCAGATCAT ATCGGTATTA TTCATGAGGG TGAGCTAAAA TATCAGCAA GAAATAACAA	1020
AGATGAAAAC TTAGAAGAGA TATTCTTCAA AATAACGAAA GGTGATTACA AATGATACAT	1080
TTAAAGATaG AAGGTATCAA ATTTAAAAaT TCTTTcAGTA TGTATGTTTT ATTAATAAGT	1140
CcGcTGGTAT TTCTTTGTTT TGCTATTTTC ACAGTCTTAT TCGCCAAAAG TAATACGGGA	1200
ACAGCGAATA GTGTGTCACC ATATATAACT TTACTATTTA ATATTTGGCC AATTGCTTTT	1260
ATCCCGATTG TATTATGTAT GGCTTGTAAT TCGTTATTTA AAATTGAAAT GAGAAATAAA	1320
TCATTTAATT ATTACTTAAG TAATAATTGG TCGATTACAA AAGAAATAAG AGCAAAGATT	1380
TTCATTTTAT CAATAGCATT TTTGGTACAT TGCTTTTtag TATTTATTAT TGCTTATATA	1440

TTGATGTATG TAGTATCTCT ACCATTGATA CCGCTCAACT TTTTATTAAC TCGATACTTT 1560
 GGTGTGTTTCG TATCAATATT AATAAACTTA GTATTATCAG TCATTGTGTG CTTGTTTTTA 1620
 5 ACATTGAAGA GTTTATTTTG GGTGTGCGG TGGGGGATAA TGCAGAGAAT CCCGCTTATT 1680
 ACGCTTGGTA TACTACCTAA TGGCTTAGTT GTAAACCATA ATTCAAATA CTTAATGAT 1740
 10 CTCAATGCCT TATATATTTT GATTATTGTT AGCATCATTA TTTTCGCGAT AGTAACATTT 1800
 TTAAATAATA AGAAAAGTTG GCGATTAAAA TGATAATTAA CGAATTAAAG TCATGTAAGT 1860
 TGAAATTTTC TAAGCAAGCG CTCACATTTG TACCCATTAT TGTAACCATA TTGTTTATAT 1920
 15 TATTTATAAA TTGGTATTTA AACGTAAATT TATGGAATGG TCGACAAATm AGTTTGTTTA 1980
 CAGCGAGTTT TAATGCAATT ACATCGCTAT TAATTTCTAT AAACGTCTAT CAAGTTATCA 2040
 ATTTTGAAGA AAATATTGGT CACTTTAATC ATATTTTAGG AAAAGCTAAT AGGCTAAATT 2100
 20 GGTAAATGC ATCAATGATT TTTACTTATA CTATTACAGC CATATGTATT CTATTAGCAT 2160
 CAATTAATTT ATTGTGGCAT TCACATGATA TGAAAATAAC ACTTATGTTT ATAGGcGTaT 2220
 CATTGTTTTT CAATGTaATT ATATTACTGC TACTTTTTAT TTTTAGTATT TTCATTAAAG 2280
 25 ATGTAATGGC TATTGTTGTC GGAGTTTTAA TGTTTATTTT TAACGTTTAT TTTGGATTAG 2340
 AAGTGCTTGG AGATCATTCG TGGTTCTATT TACCAATCAC ATATGCTACA CGTTACGTTT 2400
 ATATGTTTAn CGAAGGGGAG TATACCAGTT ACATTAAAT TGGGCAATCT ATATnATTAT 2460
 30 CACGnTGCCG AT 2472

(2) INFORMATION FOR SEQ ID NO: 643:

35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 646 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 643:

45 ATAATATAGG AATTATTTTCG ATnACAGATT TTACGAATCG TGCTACGATG CAAAATGAAn 60
 ATAAAGATCC ATATGGCGAA AAGTTAGCTT ATGGAATTGC TTTTAATGGC AGTGTGGATA 120
 TGCAAGGGGA TAAACAAGTC ACAATTCCAA AATATAGTGT AGTTACAATT ACTGGCGAAA 180
 50 ATAGTAAAAA TTATCGTGTT ACCGCCGATA ATAAGACTTA CTATGTTAGT AAAGATAAAT 240
 TAGAATATTT TAACCCGGCA GGTTTATATC AAACGCATAG TTTTAAAAAA TTAGCACCAT 300
 ATATGAAATC AAATTATAGT AATTACTATG CATACTTTAA TAGTCAATTA CATAAAAAGC 360

CACAACAACC GATACAATTA CTTTCAATG ATAATAATCA GTTATACGGT TTTGTTTATC 480
 CAATTGTAGA TAAAAAAGAA TTTAAAGATA AGTTTAATAT TAACAATAAC ATTTGGATTA 540
 CTAAAGTTGG GAATGGATAT TGTATTGCCA ATTTGAAAGA AGACAAATGG ATTTATATTG 600
 AATTGTAGGT GTAAAGATGC TAGATAATAT TATTTTATAT TTTAAA 646

(2) INFORMATION FOR SEQ ID NO: 644:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 644:

TAATATCGGA ATTTGATAAT GAAGATATCT AATTTTTTAA TATTCGTAGC TTTTATTTTT 60
 CTACTTATTT TATGTTTATT TTTAATCTTA CAAATGACAA ACCATTAAAA GTAGCATCCC 120
 AACATCAAAC AAAAAACAA TTCATCAAAT AAAAATCGCT ACAAACCAA GTCATTAAAC 180
 ACGCAATAAT TAAATTTTC CACTCATTAT AATTCTGAAT TCCAAATGTC GAATTCGGAA 240
 AACCAACTC CAAATTCCAA AAACGCAACT CCAAATTAA AAGCATTTC CTACCATTCTG 300
 GGAAATGCTT TTTACATACT GgATTACTCT GTCATTAATG ATTTTACAAC GGgAAACCAT 360
 GTCGtCATGT ATGACCaaAG TAGCGTCGCT AtCaTaAgGt GGTTCCGATC TTTATTGGAT 420
 AATnAT 426

(2) INFORMATION FOR SEQ ID NO: 645:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 3241 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 645:

nTTATTTACC CACAACATGT TGCGACATTA GGTAATGGG TACCTTATTT ACTTGGTATT 60
 GTTATGTTAG GTATGGGATT AACAAATTACA CCTAATGATT TCAAAATGGT CTTTAAAGCA 120
 CCTAGAGCAG TAATTATTGG TGTCTGTCTA CAATTCAGTA TTATGCCAC ATTAGCATT 180
 ATAATTGCAA AGTCTTTTCA TTACCACCT GATATTGCTG TTGGCGTAAT ATTAGTTGGA 240
 TGTGTGCCG GTGGGACATC AAGTAATGTA ATGAGTTATT TAGCCAAAGC TAACGTAGCA 300

	ATATATCTAT TTGCAAATGA ATGGTTGGAA GTATCTTTTCG TGAGTATGTT GTGGTCAGTT	420
	GTTCAAAGTTG TATTAATTCC AATTGCTTTA GGTATTGTTT TGCAAATTAT TAATCGTAAA	480
5	ATTGCTGAAA AAGCTTCTAC AGCTTTGCCA ATTATATCAG TTGTTGCTAT TTCATTAATT	540
	TTAGCAATAG TTGTAGGTGG CAGTAAGCAC CAAATCTTAA CTACAGGATT ATTAATATTT	600
	TTAGTAGTTA TTTTACATAA CGTATTAGGG TATACGATTG GATATTGGTT AGCTCGTCTT	660
10	TTAAAATTAG ATCGACAAGA TCAAAAAGCA GTCAGTATTG AAGTTGGAAT GCAGAACTCT	720
	GGTTTAGCTG TGTCATTAGC aGCATTGCAT TTTAATCCAA TTGCAGCAGT ACCAGGCGCA	780
15	GTGTTTAGTT TCATTACATAA TATAACAGGG CCTATTTTAG CAAAGTATTG GTCAAAAAAG	840
	TTATAATTGC ACTAATAGAA TGAAGTGGTC ATCGGACTAT GTTAAGCTTT GATAAAGAGA	900
	AAAAATAGAG GAGTAAATAT ATGTATAGAG CAGTTATATT TGATTTCGAT GGAACAATAA	960
20	TAGATACGGA ACAACATTTA TTTAATGTTA TTAATAAACA TTTAGAGATG CATAATGCCG	1020
	ATCCTATAAG CATTGATTTT TATCGTTCTT CTATTGGAGG AGCAGCTACA GATTTGCATG	1080
	ACCATTTAAT TAAAGCGATT GGTTCCGAAA ATAAAGATAA ACTTTATGAA GAACATCATC	1140
25	TTACTAGTAC AACATTACCG ATGATTGATA CGATTaATC ATTGATGGCA TTTTTAAAGC	1200
	AACGTCACAT TCCTATGGCA ATTGCCACAA GTAGTGTGAA AGCGGAAATA ATGCCCACCT	1260
	TTAAAGCATT AGGTCTAGAC GATTATATAG AGGTAGTTGT TGGTAGAGAm GATGTTGAAC	1320
30	AAGTTAAACC TGACCCTGAA TTATATTTAT CTGCAGTACA ACAATTAAAT TATATGCCGA	1380
	CACAATGTTT GGCTATTGAA GATTCTGTAA ATGGTGCAAC AGCCGCGATT GCAGCTGGAT	1440
35	TAGATGTTAT TGTTAATACG AATAAAATGA CAAGCGCACA GGACTTTTCT AATGTAGATT	1500
	ATGTAGCAAA AGATATTGAT TACGATCAAA TTGTAGCGCG TTTCTTTACG AAATAGGAGG	1560
	CGTATCATGA TGGGTTACAT TATATTGTTT TTTCTAGCTG GTCCAGTAAT TTTAGGCGTT	1620
40	GGAAATTTGG TGATTGGTCC TATATTTAAC AAACAGACAC CATTTGCGGT GCAAGTAAGA	1680
	TCTTTTGTTG kTGgkTCmAT GxTTTACTTA ATACTCGCAA CAATTGGCTA TTTTTTACTA	1740
	TTACAAGGTA AACTTTAAG AGAAAACCC CTTACCTCAT TAAATGGACG ACCATATGTA	1800
45	TGTGAAATGG TAGAACGTTT ATGTTTATGT ATGAGATAGG GTGGTTTAAA TAGTTACATA	1860
	TATTTTAATA ATAACGTCAC GATGATAAGT ACAATTAAGA TAATATCTAT GCCTACCATA	1920
	ATTGTAGCTC TTGTTGCAIT ACTTCCTTGT TCTTTTGCTG ATTTCATAGC ACGGTAGTTT	1980
50	GGCACAAAGC TAATAATTAG TAAGATTAAT ACAATTACAC CAATTAATGC TGTTGTCATG	2040
	ATGAACGACC TCCTTTATTT TTTTCAATCA ATTCCCAAAT AAACGTAGCA ATCACACCGA	2100

55

	CAATAATTAA TGCAATCGGT AAAGTCGTAC CGAGTTTAAT CTTGCGCTCT GGAGAATTAA	2220
	TAATAGTAAA TACTGTAAGA CAAATGAGTA TGAAAGCAAG TGTGCAATA ATAGTTCCTC	2280
5	CAACTAAATA TAGGATGTCA GGTTTTTCCA TACCGATATA ATTTATGATG AAAAATGCTA	2340
	CAGCAAAGAG TACCGATATT TTTGTAGCAC GTAGCAGTAT TTGTTTTAAC ATTGATATAC	2400
	TCCTTTTTAA TATTATTAAA ATTATATCAT AATTACCAAG AATAGCTGAA GTTGTATGTG	2460
10	ACTCAACGGT ACTTGAGCAA CTTTTTTAAT TTTTtagaaa AATCACAaaa TAATTGTTTG	2520
	CAAAGTTGCA AAAGCCTGCT ATAGTAGTTC TGTAACGAT TGCATGGTAT GCAAATATTA	2580
	ATGTACCAAA ATCGATAATT TATAGTATAA TTACGGCAAT AAGTTTTTTT ATGGATTAT	2640
15	TTAGTATCAA TCAGAGATGG GGTAAGAAGT TATGGAGAAC AATGAAC TAC AAAGGGGATT	2700
	GAGTGCCCGT CAAATTCAAA TGATTGCACT TGGTGGTACG ATTGGCGTGG GGCTTTTCAT	2760
20	GGGTGCGACA AGTACAATTA AATGGACAGG CCCATCAGTT ATCCTTGCAT ATTTAATTGC	2820
	GGGTATCTTT TTATTTTTAA TCATGAGAGC AATGGGGGAA ATGATTATT TAAACCCTAC	2880
	AACAGGATCA TTTGCAACAT TTGCAAGTGA TTATATACAT CCTGCAGCAG GTTATATGAC	2940
25	AGCATGGAGT AATATATTCC AATGGATTGT AGTTGGTATG AGTGAGGTCA TCGCAGTAGG	3000
	AGAATATATG AAGTTTTGGT TCCCGGAATT GCCAACTTGG ATTCCTGGTG TTATTGCTAT	3060
	TTTATTATTA ATGGCAGCGA ATTTATTCTC GGTAAAAGCG TTTGGAGAAT TTGAATTTTG	3120
30	GTTTGCTTTA ATTAAAGTTG TAACAATTAT TTTAATGATT ATTGCTGGTT TTGGTCTTAT	3180
	nnTCTnTGGT TTTGGAAATG GTGGCCATGC GGTAGGTATT TCTAATCTAT GGACAAATGG	3240
	C	3241

(2) INFORMATION FOR SEQ ID NO: 646:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 646:

	AGGCGTCAAC TCAGATGGTT TAATAATTGC CGTATTACCT GCTGCAATAG CACCGATTAA	60
	AGGTcCGAaC ACTAGTtGAA AAGGATAGTT AAATGGTGCA ATGATCAAAA CtgTtCCATA	120
50	AGGTTCTTTT TTGATATAGC TTTTtGTTGG AAATAAATAT AAAGGTGTGT CTACATTkTT	180
	TGTTTTAGTC CAGTTTTTAA GTTCcTTACG GGCAATTTTG ATACTTyTCA AAGTTATGCC	240

	AATATCGCTC TCGTATGATT TAATAGCTTT GCTTAAC TTC	TTAATTGCT CTTTTCTAAA	360
	ACTAATATCT TTAGTTTGTT GTGTATTGAA AAAAGCTTTA	CTGTCATAAA ATTTTGTCTC	420
5	AATGATATTC ATAATGAAAA GAACCTCCTT ATATGATTAT	TTTGGAAAAA GCGATTAAAT	480
	GATTTGAATG TTGTGGCCGT TAATTTTAAA TGGTCTTTCG	AATTATATAT GTTGAAAGTT	540
	GAAAATAGAG CGATGAATCG TGTACATAAT AATATTATA	ACTTTAATCA TAACGAAAAA	600
10	GGTAGGAAGA AAACAAAAAT TTATACTCAA CATCGCAAAT	ATTTTAAGAA AATGTAAAGA	660
	CAAAAGGGGA ATTGTATAGA AATCACTAAT CTGTGGGTTA	GGGTAGCTAA AGGAATAAAA	720
	ACTACTATTG AAAAAGGGTT GTAAATTAGT CAAACGTAA	TAAAAACAG TTCATTGAAA	780
15	GTGAAATAAA TTCTACTTTA ATGAACTGTT AGTTAAATAC	AACATGTCTA TAATTAGACA	840
	GTAATATAGT ATTATTTTGT TAATGCTTCA GTGATTGAG	GTACGATTG TTTTTTTCGA	900
20	GAAACGACAC CAGATAAGAA GGCCATGTCA TCTTCTAATT	GAACATTGAA TGtTCGCCAA	960
	CTTTATCTTT TTCAGCACCT ACAACTAAAA TTTTAGAATC	ACTATTAATG ATGTCAGTAA	1020
	CAACAAGTAC AAATAAGTCA TATTTTTCTT GTGCACTTAC	AGCTAACATT TCTTTTTCTA	1080
25	rATCTTCTTT ACGATTTAAC ACTTCGTCAA GGTCAACAGC	ATTAAC TTGT GCAATACGAG	1140
	TCACATAGTC ACCCATAGTA AATGATTTAG CATCCATGTT	TAATAAGAAT TCAACTGATT	1200
	TATCAGTTGT TGAAGCACCT GCTTTtAACA TATCTAAGCC	GTACTTTTGA ATATCAACTT	1260
30	TAGCAATATC TTTnAATTCT tCAGCTGCTT TAACATCTTG	TTGTGTACAT G	1311

(2) INFORMATION FOR SEQ ID NO: 647:

(i) SEQUENCE CHARACTERISTICS:

35	(A) LENGTH: 1498 base pairs
	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: double
	(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 647:

	CATATACTTT TTCATTCTT TACGAGATAC TTTACCAGAG	GATTTAGACT TCATACGCTG	60
45	ATCCATATGT GCTTGCGTTT CAGaATGTCC ACAACACAA	CGATATACCG CTTCTTTCCC	120
	TTTACCAAAC AACGTTAATT TCTTTTTTACA GTTTGGACAT	CTTGCAATTTG TTTTGCCTG	180
	TACATTCTTT TTCGTCTTAC AAGATGGATC TTGGCACACA	AGCATCTGAC CATTTTTAGT	240
50	TTTAACTTTA ATCATGAATT TACCACACGT TGGGCATTCT	GTGTTGTGTA AATTATCGTG	300
	TTTATATTTA CGATCACTAT TTTAATCCC ATTTACAACA	TCTTTCGTAA AATCTTTCAT	360

	CCATTGTGcA GTTAAAAGTG GCGACGTAA TTCTTCTGGT GCTAATTCTA ATATTTGTTT	480
	ACCTTTTGAC GTTACTTTAA TTTTACCGTC TCTTGATTCA ATGGCATTCA TATTAAATAA	540
5	TTTATCGATA ATGTCCGCCC TTGTTGCAAC TGTGCCGATA CCACCTGTTT GTTTTAAAGT	600
	TTGCGCATAT TTTTATCCT TCAATTGAAT AAAGTTCTGA GGGTTCTCCA TCGCTTTTAA	660
	TAACGAACCT TCATTAAAT ATTCTGGAGG TGTGTTTCA TGTCTCTAA TATTTGTTTT	720
10	TGAAATCTTC ACTTCATCGC CTTCTGAAAA AGGCTGTTGC ATCTCTGTAA TAGATTCACC	780
	TTGTCTAATA GATTTAAAC CTAAACAGT TGTTACATTC TCTTTCAAAA CAAATGTGTG	840
15	CCCTGCAACC TCTAAAGTTA CAGTTATCGC GTCATACTCG TGCGGAGGCA TTAAAGCTTC	900
	TAAAAACGC TCGACAATCA TATCGTATAA CTTTAATTCT CTATTACTTA AGTCTGACAT	960
	GACAGGCTC ACTTCTGTAG GAATAATTGC ATGGTGATCA GATACTTTTT GATTATTAA	1020
20	TATCGACATT TTTGATGAAA ATGTTTTAGA CATTAAATGGG CGTGCTTGGT CTTTATATGT	1080
<hr/>		
	TGTTGCCATC GTCACCTGAA TACGTTCTTT CATAGTATCT ACCATATCAG TTGTTAAATA	1140
	GTTTGAATCT GTTCTTGGAT AGGTTACGAC TTTATGTCTC TCATATAAGC TTTGAAGTGT	1200
25	ATTCAATGTT TCTTTAGGTC CAATTTTATA ACGTCTATAC ATATCTTGTT GTAAATCTGT	1260
	TAAATTGTAC AGTGATTGCG GATACGACTT CTTATGTTTA GTAGCAACAG ATTTAATCTT	1320
30	ACCATCGACA TTTTTCAAAT TATTAACCAT CTGTTCTAAA GTTCTTTAaw TGGtATATCG	1380
	CTGATTTGaw TCTAGCTGAA AATCAAACCC TTTTACCGTT AATGATAATG TAAAGTATTG	1440
	TTGTGGnTTG AACTGATTAA TCTCTTGTG GTCGTGTAAT TTAATAAATT GAAACGGn	1498

35 (2) INFORMATION FOR SEQ ID NO: 648:

(i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 1044 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 648:

	TAAAACAATT CGTTTTATTA ATACAGTTTG TAAAAGTATT CTCTTAGTAC TAATAGCTAA	60
	TGTAATGATA GAAATACTA GTGTTATTAA AGATTTGAAT AAAATAAAAG AAACCTGAGAA	120
50	ATATTGGAAT GTATTAGATG ATTATTACAC GATTGAATTT GCACCTTATC ACGAAACAAA	180
	ACAAAGTTTG ATTGATAATA TGGTGCGATC AGAACAATTA GTAAAGGCTA GTGAAGCAGA	240
55	AAATAATGCG ATTTTATTCA AACCAAAGGG TGAATCCGTT GACAATGACA ACTTTTCGCC	300

EP 0 786 519 A2

TCAACCTGAT ATTCCGATAA AAAATCAAAA AAATAATGTC GAAGTAATTA TTCCACAAAA 420
 GTTTCATGCA ATGCGTAATG AAATCAATCA AGCATATCAT TCATGGTTTG AATTTGTACA 480
 5 AAATAAAAAT AATAAAGAGA ATAAGTTATC TATACAGTTT ATCAACAAAA ATGATTGTCTG 540
 AATTTTTTCA TTTGATGCAC GAGATAGTCG CCATTTGTCA TTTATAGAGG CGCCAATCAT 600
 TGTGAATGTT CAGGCATCAG ATTTATCGaA TGATTTtLAT TATGCCATGa TCaGTCaAGG 660
 10 CGGGTATTTa TTCaAAAATT ATGaCGCGCT AGTAAAAAAT ATTGGAAAAG TATCCATCTT 720
 GATGGGGAAA TCCAGTGGAA TAACCAATTA TAAAGATAGC GTGATGGAAA TGTATCATGA 780
 15 AAACAATTTG AAATTAACAG TACTCAACTT TTCACAAATC ATTATCGCAA TCATTTTAAT 840
 AATTATTATT TTATTTGATG TGAAATATTA TTTTGAACAG CATCGAAAAT TACTCGTAAT 900
 CAAAAAGCTA TATGGTTATT CAACATTAAG AGCCAATTAC CAATACTTAT TAATAAATAA 960
 20 TATAGTTGTT ATTTTTATTG GAATATTGAC GAATGTAATT TTACATTCTC ACTATATAAT 1020
 GATGTTATTT GCAACGATTG TTGT 1044

(2) INFORMATION FOR SEQ ID NO: 649:

25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 399 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 649:

35 GAACATATTG GGTTATGCAA GGGGGTCACT CTTCACTT ATAAACAACA TTTTAATAAT 60
 GTAAAGTTTA ACCAGCTAAC ACTTTTGTTA GCTGGTTTTT ATTTTCCTTC AATTTTAA 120
 TGGTTAAGTC CCCTTCTATA TCTTATAAGA CAATCATTAT AATCAATTCA ATTAATACAT 180
 40 TAACAACCAC AACTAATAAA TATAGTAACT TCAAAATCCA TATTTATGTC TAAAGATAAT 240
 CTCAATGTTG TTCACGTCAA TAAAATTATC CCTAGGTTTT TAAAAATTGT ACATGTTTAA 300
 ACAATCAAAA GTGTACATTA TTAAATTATC ATTTCCAGTT AGATTTAGAA AACATTCA 360
 45 CCACGCATGG ACCAACGTAT TCGTCTTcAT TcATTTTAG 399

(2) INFORMATION FOR SEQ ID NO: 650:

50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 747 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 55 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 650:

	GTACTAGGTT CTAnGATTCC CTACTGTAGT CATAGATATT TTCCAAACAG AGCCTGACAA	60
5	CTTTTCATTT TTAATAGTGA TCACTATATT AATCGCTATT GCAATTTATG CATGTCGATT	120
	TGTTTGGGTT TATTTCTGGT ACAAAGATTT TTATTTCCCG AAAAATATAC AATCTTATCT	180
	AGACGAGGAA CATGATTCAC ATGAAACACC ACCTTCTCGA GTGCGTTACG CATTATTAT	240
10	GACCATGTGT GGTATTCACG GTACAATTTT ACTTTCAATG GCACTTACAT TACCATTAT	300
	CATTACAAAA GGACAAGCAT TCGAATACCG TAATGATTTA TTGTTTATTG CATCTTTCAT	360
15	GGTATTAATT AGTTTAATCT TAGCGCAAAT TGTTTACCT TTAATTACAC CATCTGCCGA	420
	AGATACTACT TTAAAGGTA TGACTTATCA ATCTGCCAAA ATTTTCATTG TTCAAAAAGT	480
	GATCCAGCAT TTAAAAACG AAAGTAAAA AGACAAAAAC GATACAAATT ATCGCCCAGT	540
20	ATTAAACCAA TACTATGGAG AATTGTTATT TTTATTAAAT TCAGAACCTG ATAATCAAAA	600
	TACtAAAGaa CTCAAACGTT TAGAAGATAT TGCaAAAGTA ATCGAAACAT CTACACTTGA	660
	GCGTTTAATT GATAAAGGTA AGGCAACATA TCAGGATATT AATAATTACC GCAATATTGT	720
25	CGAATTAACA GAGACACACC GTACTGC	747

(2) INFORMATION FOR SEQ ID NO: 651:

(i) SEQUENCE CHARACTERISTICS:

- 30 (A) LENGTH: 1373 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 651:

	ATACAATACT CTTTATTAT TCAATAAGCC ACTTCCTATA GCAAATGTTT AACTTTAAAT	60
40	ATTTTTTCGAT GCTAACAAAA AATCACACTA TCATCTTTTA AAATGAAAGT GTGATTACAA	120
	GCAAATCTGT AAAATTTATA AAGCAGAAAC AATTCAACTT TATCATTATG ACATTTCAAT	180
	TAAACCTTCT ACATTATAGT TCCAAGCATC TTACACATGA ATGCAAGTAT TTAACGATTT	240
45	AATTGTGACA TAGCCTGTTG ATATTGTGTT TCATTGATAT AATTTTGTIG CTTCATTTTT	300
	TCTAAGTTCG TGCTTACAG TTGCGTAAAA TTCTCTGACA TATTATTGAT ATTATATACG	360
50	CTAGGTGCAT TGACTTTACT AGCTAAAATA GCGCTTTGTA AAAGTGTAT GTGAGACATT	420
	GTTGTACTAT TTTATTACAC GGTTGTTCCA AAGTAATGGT TTGCTGCGCC CTCAAGCGTA	480
55	TATTGATTAT CCCCAAAGTA AATATTATTT AAATAAAAGC TTAAAATTTT GTTCTTATTA	540

TCATTATCAT AAAAATAATT TTTGACAACT TGTGTGTAA TGGTACTACC ACCTTGACACA 660
TCTCTGTCGC TAATCGTTGA AAATAAAGCT CTAGTTGTAC CTTTCAAATC GAATCCATGA 720
5 TGATTGTAGA ATCGTTCATC TTCCATTGAA ATAAAGGCAC CTTTAACATA CTCTGGCATG 780
TTATCAGCTG ACACAAAAC ACTTTTATTT TCAATTTTTC TTAGTTCATC CACATTATCG 840
CGTGTAGATA AAAAATACAT GATACCAATA AACAATGCGA TAATGATTAG AATGGTTAAT 900
10 AATATTTTTA ATAGTATTCG TTTACTTTTT TTCTTTTTTC GCGGTTTGCC AACTGGTTGA 960
TAATACGTAT TATAGTGAGG TTCGTGTTTC ATATGCTCAA AATGTTCAIT TGAGTTTGAG 1020
15 TACCTATCGC TTCTTTTCAT GCGTTTGCTC CTCTTTTAA AACTCACTTA GATATACCT 1080
TGaGTTTACC AGTACTATCA CAAATAGGCT ACACTTTTTG GGAAAATCAG TCCAAGGGCT 1140
TACAATCGTA TACGCCATCA TACTTACTTT TTTGTTTTTT GAAAAAATTA TAGATAAATC 1200
20 ATTGCAATTT TAAATATTAA TCATGTCAA TATTGTTATA TTTTATAAAA ATAAAAGACC 1260
ATCCCTATTA AATGCCAATA GAGACGACCT TTTATTTGTT ATTCATTTAT TAAACTAAA 1320
ATCCATATTT CATTTCAAAC GAAAATATAT AAATTTTAAC AATCGrTAAC CAC 1373

(2) INFORMATION FOR SEQ ID NO: 652:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 859 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 652:

GGCAGATAAT TTAGTCATTG TTGAATCGCC TGCAAAAGCA AnaACCATTG AAAAGTATTT 60
AGGTAAGAAA TATAAAGTTA TAGCTTCAAT GGGACACGTC AGAGACTTAC CAAGAAGTCA 120
40 AATGGGTGTC GACACTGAAG ATAATTACGA ACCAAAATAT ATAACAATAC GCGGAAAAGG 180
TCCTGTTGTA AAAGAATTGA AAAAACATGC AAAAAAGCG AAAACGTCT TTCTCGCAAG 240
TGACCCCGAC CGTGAAGGTG AAGCAATTGC TTGGCATTTA TCAAAAATTT TAGAGCTTGA 300
45 AGATTCTAAA GAAAATCGCG TTGTTTTCAA CGAAATAACT AAAGACGCTG TTAAAGAAAG 360
TTTTAAAAAT CCTAGAGAAA TTGAAATGAA CTTAGTCGAT GCACAACAAG CGCGTCGAAT 420
ATTAGATAGA TTAGTTGGCT ATAACATCTC GCCAGTCTT TGGAAAAAAG TAAAAAAGG 480
50 GTTGTACGCG GGTGAGTTC AATCTGTTaG CmTTCGTTTA GTCATTGACC GTGAAAATGA 540
nATTTCGAAAC TTAAACCAG AnGAATATTG GACTATTGAA GGAGAATTTA GATACAAAAA 600

5 AAAAGATGTT GAGAAAATTA CAGCTGCATT AGATGGAGAT CAATTCGAAA TTACAAACGT 720
 GACTAAAAAA GAAAAACGC GTAATCCAGC AAACCCATTT ACAAATTCTA CATTACAACA 780
 10 AGAGGCGGcA CGTAAATTAA AcTTTmAAGC AAGAAAAACA ATGATGGTCG CACAACAATT 840
 ATATGAAGGT ATAGATTG 859

(2) INFORMATION FOR SEQ ID NO: 653:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 747 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 653:

20 TTCAACTTCG TTTGGAAATC ATGTTCTCTCA ATTGTTGGAC TTAAACGAAT TTCTTTAACA 60
 TTGATAATTT TTTGTTTCTT TTTCATTTCT TTTTCTTTT TCTGTTGTTT GAATTTGAAT 120
 TTACCGTAAT CCATAATTCT TGCAACTGGT GGTTCGCGAT TCGGTGCAAC GACCACTAAG 180
 25 TCTAAATCTA CAGGTTTCAGC CATTTCTAAA GCTTCACGCT TTGATTTAAC ACCAATTTGT 240
 TCACCATCTT GACCGATTAA ACGTAATTCT TTTGCACGAA TTTTGTCAAT GATTTGAGTT 300
 TGATCTTTTG CTATGGTTGA CACCTCCAAA ATTTTACGA AATTGTCACC AAGCAAAAAG 360
 30 GAAGAGCAGG TATAAAATAC CCGCTCTTCC TTATACACAG TTATGTGTAA TGTGATTAAAC 420
 CTGCCAACTG CTTTATGCGT CGCTACAGGT GAGAAGCGGG TGCTTCTACT TGGTTCGTTT 480
 35 CGTATTCAAC GTTATTAATC ATATCAACAA TTCACATTTA AGTCAACACT ATAAGTGTA 540
 TTATTTTTAT TTTAACCTTT TATTTTCATCC ATTGACACGT CTTGACGTAA ATCTACTTGT 600
 TCTAATGGAA TTTTTTTCGT TTTATATCGA AGCTTATGAT AAATAAAGAA TGCTAAAAAT 660
 40 ACTGGAATTC CCATATACGT AATTAAGAAG CGACTAAAAT TAAAATCTCC TGTnTTAATA 720
 AAGTCAACAT CTTGCCCAAn AAnTACT 747

(2) INFORMATION FOR SEQ ID NO: 654:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 501 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 50 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 654:

TTGTGCTTCT TTTTtagCTT CTTGAACCTC TTGTGCCTCT TGTGATGTAT CACTyAAATT 120
 ATTTGCACTT GCTTCTTCTT TTATCGCTGC TTGTTGTGCT TTCAATGCCA CTGCTTTTGr 180
 5 TTCTTyATTT GATACAGCCA CACTTTTATC CGCTTCTGCT TGTGCTTCTC TTTTAGCTTC 240
 TTGAATCTCT TGTGCTTCTT GTGATGTATC ACTTAAATTA TTTGCACTTG CTTCTTCTTT 300
 TATCGCTGCT TGTTGTGCCT TTAATGCCGC TTGCTCATTT TTAGATTGT TTA AAAATCC 360
 10 TTCAACACGT TCTTTTGTAT AGGCAACCGT TTCTTCAAGT TGCCTTTTTTC TTTCTTCAAA 420
 CTTTtGCGAC AGTTCTTGTh CTTTGACTTT nAAATCATCT GCTTTTTGAT AAACtTTATT 480
 15 TTAAAAATACC AACCTAAAGC C 501

(2) INFORMATION FOR SEQ ID NO: 655:

(i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 830 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 655:

CACCTTGTCa TAATTAATTT TTTGATTTTT CATTTTACTG ATAATAGGTT CAGCATTaAT 60
 CATGATTTAA CCTCCCAT TTAATCATTa ACTTCTATTA TATATGATTC ATATTAAATG 120
 30 TCAGTCAAAA AAGTTAGAAA TTCATTTTAA TGCATTTATA TTTCGAAAAT CCCTTATGTA 180
 TCTAAAAGCA TTTTTTAAAC TTGAATTTTA AAACACTAAA CAACACATAC GTCTCTGTGT 240
 35 CATTTTCATT TTTTGTATGT CATATATATG TTTACTTCAT TTAAATCAAT TTCATCTTAT 300
 AATTTATCGT GTATTTTACA AAAGATTGAC TTCAATTCAT CGTAAAAGTT ATACTTTTGC 360
 CATTTTTTAA TGTAACATGG TGTTAGTAAT AAAAATAATA CATTGAGGTG TTTTACATGA 420
 40 CAGCATTATT CCCTTATATC GCTTTTGAAA ATTCAAAGA AGCCCTTGCA TATTACGAAG 480
 AAGTATTTGG TGCAACTGAC GTTAAACGTT TAGAAGTTGG CGAAGAACAA GCGTCACATT 540
 TTGGTATGAC TAAGGAAGAA GCGCAAGAAG CAACTATGCA TGCTGAATTT GAAGTGCTTG 600
 45 GCGTAAAAGT GTTATGTTCT GATTCTTTTG GTCGCGCTGA CAAAATTaAT AATGGCATAT 660
 CATTATTAAT TGATTATGAT GTTAACAATA AGGAAGATGC TGATAAAGTT GAAGCATTCT 720
 50 ATGAGCAAAT TAAAGATCAT TCTTCAATTG AAATAGAATT ACCGTTTGCT GACCAATTCT 780
 GGGGTGGCAA AATGGGCGTC TTTACCGATA AATACGGTGT TCGTTGGATG 830

(2) INFORMATION FOR SEQ ID NO: 656:

55

- (A) LENGTH: 539 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 656:

10	GTATCCATGG GCCCGTThCG CACAACATTT GGnACAATTA GGTACACGnG TTGTCaTCGG	60
	TCGTTTCGGT ATAATTTTAT CGAATGaAGG CGGTGCGTTA CAAACAATGA AACTACCATA	120
	CGAATATTAC ATTGGTGGTA AATTAGGTTC TGGTCAACAA TGGTATTCAT GGATTCATAT	180
15	CAATGATTTA ATTCAAGCTA TTTTATTTTT AATAAATAAC GAGTCAGCTA GTGGTCCGTT	240
	TAATTTAACT GCACCTATAC CTGAACGTCA AAATTTATTT GGCTACACTT TAGCAAGAGC	300
	TATGCATAAG CCTCATGAAA CTTGGGCACC AAGTCTTGCA ATGCGTCTCA TACTTGGTCA	360
20	AATGTCAACA GTAGTATTGG ATACTCAAAA AGTATTACCT aATAAAATTC AAGCATTGGG	420
	aTTCCAATTT AAATATAGTA ATTTAAAAAT GGnACTTGAA GATTTAATTA AAGAATAATC	480
25	AATACCATTA ATGAGCATTG GAAACAACAT ATGTACTAAA TGTAATGTCT AGAGCGACT	539

(2) INFORMATION FOR SEQ ID NO: 657:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1106 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 657:

35	ATCAAGTTGA ATATCATCCA TATTTAACCC AACATAAATT GArATTATAT TTGGCAGCAC	60
	AACGTATCGT gATGGaATCT TGGTCACCAT TGATGAATGC ACAAATTTTA AATGATGAGA	120
40	CAATTAAAGA CATTGCTCAA GAATTAGGAA AGTCACCTGC CCAAGTTGTT TTAAGATGGA	180
	ATGTGCAGCA TGCTGTGGTT ACAATCCCTA AATCGGTGAC ACCAAACAGA ATCTCTGAAA	240
45	ATTTCCAAAT ATTTGATTTT GAATTATCAG ATGAACAAAT GACGCGAATT GATGGTTTAA	300
	ATCAAGATAA GAGAATTGGA CCTGATCCAA AAAAATTGTA AGGCTAGATT AAAATCGCTC	360
	AACTGATGAA AAGGTTAGAT GAATTGTCAG GGCTTGGGAC ATTAAGTTCT TAGGCAATGT	420
50	AAAAAGCTG ATTTCTATTA ATTATTTGAT AGAAATCAGC TTTTTTGATA TGTATTTTAT	480
	AATGTACAGC TCGTTGAGCT GCTATTTTCC TTATATTAAG TGCCATTAAT ACAAACCTA	540
55	GCTCTCGTTT AACTTTATTT AtTCCTCGAA CTGACGTTCT AGTTAAACCC AAAATAGCCT	600

CTGGTTCAGA AAGCTTTTGA TTAATTTGGA CTTTAAAGTA TTCCCAATTA TAATTCCTTCA 720
 TGATTtTCIT ATTGGATTTT GAATTTGGTT TCATGCATTG TTGCCTCAAA GAACATGCTG 780
 5 AACAGTCATC GCATTCATAT AGTTTGAAGT CTCGTTTAAA ACCATATCTA TCATTACGGT 840
 ATGCATATCT TTTAAACCT ATTCTTTTGT TATTAGGACA TATAAATTCA TCATTAAGTT 900
 CGTCATATTT CCAATTTTGA GTGTCGAAAA TGTCACTTTT AAACCTTTCTA GTTTTATCtT 960
 10 TAATAACAT GCCATACGTA ATAAGTGGCG TTTTATTAAA ATCATCTATA ATGGCCATAT 1020
 AGTTTTGGCT CACTACCCAT AACCTGGCAT CAGCTACCAA ATGAACCGAA GGGATTTTTG 1080
 15 GAATCCATTG GTTGAAAAAA TGGGAA 1106

(2) INFORMATION FOR SEQ ID NO: 658:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 658:

TTTAACTTT ACTCTTTGAT TTAAAGAGTG ATAAATGTTT ACAGTTTAAT TAAAACTGCA 60
 TAAGAACTTC TAGCTTTTCT CTTTCGTTCA AAGAGAAGCA GCTGTTGCA GTTTAATCAA 120
 30 AACCACATAA AGCTTTTAAAC TTTACTCTTT GATTTAAAGA GTGATAAATG TTTACAGTTT 180
 AATTAAACT GCATAAGAAC TTCTAGCTTT TCTCTTTCGT TCAAAGAGAA GCAGCTGTTC 240
 35 GCAGTTTAAT CAAAACCACA TAAAGCTTTT AACTTTACTC TTTGATTAA AGAGTGACAA 300
 ATGTTTACAG TTTAATTAAA ACTGCATAAG AACTTCTAGC TTTTCTCTTT CGTTCAAAGA 360
 GAAGTTCTAA TACCACCATA TCGTGCGATC GGGAACGGTA 400

(2) INFORMATION FOR SEQ ID NO: 659:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1899 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 659:

ATAATTACAA TGGCTACTGC AATTATTGTT GGAATTATAT ATTCAGTTT AGTCATCATT 60
 TATGCTCCCT TGATTTCAAA TTCATATCAT TAGTTTACCA TATTGAAGAT GATATAATAA 120

EP 0 786 519 A2

	AAC TT T T A A C T	G A G C T T C A T G	G G G C A C C A G G	T T T T G A A G A A	G A A G T A A A A A	A T T A T A T G A C	240
	T C A G C A A A T G	G C G C C G T A C G	T A G A T G A A T T	T A T T G A A A A T	C G T A T G G G T G	G A T T T T T T G G	300
5	T G T G A A A A A A	T C T A A A A A T C	C A A A T G C A A A	A C G T G T A A T G	A T T G C A G C A C	A T A T G G A T G A	360
	A A T C G G A T T T	A T G A T T A C A A	A T A T C A C T A A	A A A T G G A A T G	A T T C A A T T C A	C A A A T T T A G G	420
	T G G T G T T G C A	A A T G A T A T T T	G G C A A G G A C A	A C G C T T A G T A	A T T A A A A A T A	G A A A T G G C G A	480
10	T A A A A T T A T C	G G T G T T G T T T	C T A A T A T A C C	T A A A C A T T T T	C G T A C T G G T A	G T G A A G G T G C	540
	A C C G G A A A T T	A A A G A T T T A A	C A T T A G A T A T	A G G T G C T C A A	A A T G A A G A T G	A G G T G C G T G A	600
15	G C G C G G A A T A	G A T A T A G G A G	A T A C A A T T G T	A C C T C A C A C G	C C A T T C A C A C	A G T T A T C T G A	660
	A C A T C G A T A T	A G T G C T A A A G	C A T G G G A T A A	T C G T T A T G G T	T G T G T C T T G G	C A A T T G A A A T	720
	A C T A G A A T T A	T T A A A A G A T A	T A G A A T T A G A	T G T A G A C T T G	T A T G T T G G C G	C A A A T G T T C A	780
20	A G A A G A G G T T	G G A T T A C G A G	G T G C G A A A G C	A T C T G C A G A G	A T G A T A G A C C	C A G A C G T T G C	840
<hr/>							
	A T T T G T A G T T	G A T T G T T C A C	C T G C C A A T G A	C G T T A A A G G A	A A C C A A C C A T	T A T C T G G T G A	900
	A C T T G G T A A A	G G G A C G T T A A	T T C G C A T A A A	A G A C G G T A C A	A T G A T T T T A A	A G C C T G T A T T	960
25	T A G A G A C T A T	T T A T T A A A G T	T A G T A G A A G C	A C A T G A C A T T	G A A C A T C A A T	A C T A T A T G T C	1020
	A C C A G G T G G A	A C A G A T G G T G	G A G A A A T T C A	T A A A G C T A A T	A T T G G T A T T C	C G A C T G C A G T	1080
	T A T T G G T G T A	T G T G C A C G A T	A T A T T C A T A G	T A C A G A C T C A	G T A T T T G A T A	T A A G A G A C T A	1140
30	T T T T G C A G C T	A G A T C T T T A C	T T T C A G A A G C	C A T T T G T A A T	T T A G A T A A T A	A T C A A A T A G A	1200
	A A C A T T A C A A	T A T A A A T A A T	C G G G T A A T A A	C A A C T A T T A T	C T C T A A A T A G	T T A T A T A T A A	1260
35	T C A T T A A T T A	A G G A G A C A T A	A A A A T G A A A C	A A C T T G A A T C	A G A A C A A C A A	T T T G A A T C T T	1320
	T A A A A C A A G G	T G C T A C A G T A	T T T G A A T T C A	C T G C A G G C T G	G T G T C C A G A T	T G T A G A G T G A	1380
	T A G A A C C A G A	T T T A C C G G A A	T T A G A A G C G A	G A T A T C C T A T	G T T T G A C T T C	G T A T C A G T A G	1440
40	A C C G T G A T A A	A T T T A T G G A T	A T T T G T A T T G	A A A A T G G T A T	T A T G G G T A T T	C C A A G T T T T C	1500
	T A G T A T A T A A	A A A T G G A G A A	C T G C T T G G A A	G T T A T A T T G G	A A A A G A A C G A	A A A T C A A T T G	1560
	A A C A G A T A G A	T G C A T T T T T A	G C T C A A T A C G	T G T A A T T T A G	A C T A G A G A A A	A A C G G G G T A A	1620
45	T A C T C G T T T T	T C T C T G T T A C	T A T G T G T T G A	T T T A T T G T A A	A C T A T T A T A A	G G T G C G A A A T	1680
	T A G G A G T G T T	A C A T A T G A A T	A C C T T T C A A A	T G A G A G A T A A	A T T A A A G G A A	C G T T T A A G C C	1740
50	A T T T A G A C G T	T G A T T T T A A A	T T T A A T C G T G	A A G A A G A A A C	T T T G C G T A T T	T A T C G A A C A G	1800
	A T A A T A A C A A	A G G T A T C A C G	A T T A A A C T T A	A C G C T A T A G T	C G C A A A A T A T	G A A G A T A A A A	1860
	A A G A A A A A A T	T G T A G A T G A A	A T T G T T T A T T	A C G T T G A T G			1899

55

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 3774 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 660:

10	GTATAATATC CTTTCAATCT GTTTTCATAT TTTATATATT TTTTAAATAT AAGTGCTAAA	60
	TGTTTTAACT AAAGCATAGA TTGACAAGAT GTTATACAGA ATTTCAAATT CTATCCAATA	120
15	TTGTTTGAAG TGTAAGTATCA CTGGATTGGT ATTAAACAAT GTAAAGGAGA GATTGCAAAT	180
	GCCGTATAAT TACAAGAAAC AAAATGGAGA GTTAATGTCT GTAATGAGCC AAGGTGAAAA	240
	GTTTATTCAT CAATCACCCG TTAATGATGA ACTTAGTGCA TTGATTAAGT TATTAATTTC	300
20	TAAATTAAC GGTGTGCATT ATTGTGTTGA TATCCATAAA AAAGAATTAA AGGAATTGGG	360
	TGTAaCACAA ATGAAAATTG ATGAAGTCTT GAGTTTTAGA CATTTAGATT TATTTACTGA	420
	TCAAGAAAAA GTGACGCTTG AATTTCGAGA AATGTTAAAT TCAATCAAAG ACTTTAAGAA	480
25	GTTTGAAATT ATTGACCGGC TAAATCATT TTATGATGAA GAACAAATTA TTGATCTTGT	540
	CTTGTGTGTA AACCAAATTA ACGGTTGGAA CAGATTAAAT ATTATTAGTG ATAGACTATA	600
	ATTGTTTATA TAAATGCAGA GTTTCATCTC GAACGCTATA TCATAACAAA TCATGCCACT	660
30	ATACAGGTCA AATCTGTAT AGTGGCATT TAAATTTATCC CTTTGAATAC TGTATTTTAA	720
	CGAATATCGG TCCACCTGGT CCAACAGGA TACCTAATAG GAACCAAATG ATGACAAATA	780
35	CTGTCCATAC AATACTTAGC GCGATTGAAT ACGGCATTAA ACTAGAAAGT AAGGCTCCGA	840
	GTTTCATGCG TTTATCGTAT TTTTGTGCAT AAGTTAATAA TAAAGGTAAG TACGGCATCA	900
	TCGGTGTAAT TGGATTGGTA ATTGAATCGC CTACACGGTA AATGACTTGT GTGAATGCGG	960
40	GATGAAAGCC GATAAGGATT AACATTGTA CGAATATCGG TCCTAAAATA CCCCATTTAG	1020
	CCGATGCGCT TCCGATTAAC ATGTTGACCA TTGCACTCAG TACAATAATA CCTAGTATCA	1080
	ATACAATACC GTTTTGATGT TCTAATAATT TGGCACCTTT AACAGCAGCG ATAATTCCTA	1140
45	AATTACTCCA CTTTAAATAC GCAAGTAGCT GTGCTGCAAA AAACACAATA ACGATAAATG	1200
	TTCCCATTGA TCCTACAGCA TCGCCGAACA TTTTACCTAA GTCTTTTGTA TTTTAAATTT	1260
	CTTTGCTTAA AATCCCATAA ACTAATCCAG GTACTAAAA TACGACAAGA ATAATTAATC	1320
50	CGACACCGTT AATTAATGGC GCATCGTCTA GTAAGCTGCC TGTTTTAGCA TTTCTTAAAA	1380
	AGCTATGTTT AGGAATGGCT GTAATAATTA ATAAAATAAT TGTGACTATG AAAGTATAT	1440

EP 0 786 519 A2

	CATCATGCAT TAAACTGTCA TCATATTTTC CTAATCTAGG AATAATGAGC TTAGTTGTAA	1560
	CTAGCAATAT CGTAGGAAGT AATACAACGA CACTCGCTGC GATAAAGTAC CAGTTCATAG	1620
5	CAACGTTTGT TTTAATAGAA TCTGAAACGA TACGTGTTGC CGGTTCTGTA AATGAATAGA	1680
	CCAAAGCATC TTGCATACCA ACAACTATAT TTGCTGCAAA TCCTCCAACA GCGGAAGCAT	1740
	ATGCCATCGT TAGTCCAGCG ATAGGGTGAT AGCCAATTTT AATAAAAAGC ATTGCTGCAA	1800
10	GCGGCGGCAA GATAATTGTC GCAGCATCGC CGGCTGTACT ACCTAAAATA CCAATTAATA	1860
	TAATAGTCGG TAAAATTAAG AAACGTGGTG CGCGATTAC AACAGAAATC ATTAACCTAT	1920
	CGAAGTATCC TGTTTTCTCT GCAACACCAA TACCAATCAT CACTGCTAGT ACTAAGCCTA	1980
15	ATGCTGGGAA CTCTGAGAAA TTTTAAATCG TATCATTCAT TATCATCGTA AATCCATCAT	2040
	GGCTAATTAT ATTTTAAATA TAAATGGTTT GATGCGTACC TGGATGCTTA ACAGATACAT	2100
20	TAAATAATGA GATAACCCAT GTCATAATGG CTAAGCCAC ACACATTAAA AAGAATAAGA	2160
	CGCTAGGATC TGGCAATTTA TTTCCGATTT TTTCAACACT ATTCAAGAAA CGATTGACGA	2220
	TAGACCCCTT TTGTTGATGT TTTGATGTCA TCAATTATTC CCCCCTTTGT TAAATATTTA	2280
25	AAGTGTAACA AAAAATACTC TCAAAAGTAA CAATTTTCAG GAAATAAAAA AACTAATATT	2340
	GTTAAATATT TTGAGTTATT CAATAGAAAG TGTATAGCAG AGTAGTTAAG ACTGCCTGAA	2400
	GACTTATCTA TTAGGTTTAT GAAGCATCGA ACAGTGGAAG ATAAGGACTG TAAGTTTAAG	2460
30	ATATGTTGTA TAGGAGTGAC TGAATGAAAC GTTTGGAAAA TAAAGTAGCA GTCGTAACAG	2520
	GAGCAAGTAC AGGTATCGGT CAAGCTTCTG CAATCGCTTT AGCTCAATAA GGTGCGTATG	2580
35	TATTGGCGGT AGACATAGCT GAAGCGGTAT CGGAGACTGT CGATAAAATT AAAAGTAATG	2640
	GTGACAATGC GAAGGCGTAT AATGTGGATA ATGCAAGCGA ACAACAAGTG GTAGACTTTG	2700
	TGTCTGACAT AAAGGAACAG TTTGGAAGAA TCGATGTGTT GTTTAATAAT GCCGGTGTGG	2760
40	ATAATGCGGC TGATAGAATT CATGAGTATC CAATAGATGT GTATGACAAG ATTATGAATG	2820
	TAGATATGCG TGGGACATTT TTAATGACGA AAATGATGTT ACCTTTAATG ATGAATCAAG	2880
	GTGGCTCTAT TGTTAATACG TCTTCATTTT CCGGACAAGC AGCAGACTTG TATCGCTCTG	2940
45	GATATAATGC TGCAGAAAGT GCAGTGATTA ATTTTACAAA ATCAATCGCA ATTGAGTATG	3000
	GCCGTGATAG CATTCGAGCC AATGCGATTG CACCAGGTAC AATTGAAACC CCGTTAGTAG	3060
50	ATAAACTGAC AGGTACGAGT GAGGATGATG CAGGTAAAAC ATTTAGAGAA AATCAAAAAT	3120
	GGATGACTCC GCTGGGACGT TTAGGTAAAC CAGAAGAAGT TGCTAAATTA GTAGTCTTCT	3180
	TAGCATCTGA CGACAGTTCA TTCATAACTG GAGAGACGAT TCGAATTGAT GGTGGTGTGA	3240

55

AATTATTTAA AATCGATATC CAGTGGAAAA GAATTTGGCA TGAAGTAGGC AATGTATGCA 3360
 TATTGTCGCA ATGAAAGACA TTAAAGCGG AGATTAATTA ATCTTTGAAA ATCACATATT 3420
 5 GTTCATTTGA AGTGTATTGC TTAAAGCTTG TTTTAACGTA TTGTAGGTCG TGCATCTAAT 3480
 TTATCAGAAT CTCGAGTTCA AACTTTTGGG GTATCTTTAA AATAAGCTGT ATTTTGTCTA 3540
 TTCTAATAAA TTAAGGAGAA TTTTATGTTA AAAGAAAAAG AAAGTTTTAG ATTGCTATAT 3600
 10 CAAGCTATAA GAGAGATTGC AGATAAAATT GGAGATAATC AGTTAGAAAC TAATTCCGTT 3660
 AGTTTATtAT tATTGGACTT TGATTTTGAA CATGAAGTAT TTGATGAATT GTATCTTGTG 3720
 15 ATTTtAAAAT ATTTAAATAC AGTAAGTATA GAGAACATAA GTCATAGTGA GCTT 3774

(2) INFORMATION FOR SEQ ID NO: 661:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1078 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 661:

TACTGGTTTT GGATTTTGGG GGTAATACAG TACCTAATAG TAATnATGGT GTCGTCAnAA 60
 TTATATCTTT CCGTGATGTT CTTACTCATT AGAACATCnG CCTTCAGAGG AATCATGATA 120
 30 CGAGGAATAA GAAATTTAAA TGTGAGCGAA GTCAATATAG TATTTGCGAT TATTTTTATT 180
 AACTCCATTA TTATTGTTAG TTTGATTTTT CGAGGATAAC TTCAATTTTT GCATTTTGAG 240
 35 GTTTTTTAAC ATATCTATTT GCATCAGTTG ATGGCAACCT TTTACTTAAA TCTATTGTGT 300
 AGTTATTGTC TGCACCTGTT ATTTTAATTT GTCCTTTTATT ATAAGAATTA TTATATAATT 360
 TTTTACTTTT AATTAATGTT TGACGAATAC GAAATCTAA TTCTTTTAAA GTTAAACAG 420
 40 GCTTATTGCC TTCATAAACT GGAAATCCGC CAGTAAACGT TTCTGCTTTA TCTTTATATG 480
 TTACATTGAG TTTATAGTGT TTATCGTTAG ATGTTGCTGC AGGAGTAACA CCACCAGTAA 540
 ACGTTTCTTG AGATAATGCA AAAGaATCAA TGGTTTCTTG GTCTTTTATG CyAAAAATAT 600
 45 CAACGCTTTT ATTCTTAAT TGGTTGATAT TGCCCCAACT TTCAGGTCCA TAAACTTGAA 660
 TATGACTATA CCAAGaAAAC TGTAACAACG TTGCATGAAT CgTACCGTTA TCTTTTTGCC 720
 ATAACGTAAT GTTAGAGAAG GTTAAATATT TTTGCGAGTA ATATTTAGTT AACTCATTAA 780
 50 CGTTAGTTTC GTTTTGATTT ATATAAaAG cTTTCGCTTC AGATGAAGAA TTGATAkGTG 840
 TATTAGGAAA TTGTGTAGAT GCTGTACCTA ATAGTAACAA TGTTGTTGAT AAAATAATTT 900

ATAAAAAGGG GTTAATTAGA TAATTGAAAT TATCCGCATT TACAAAAGGT AATAGGTTAG 1020
 TTAGATTTTT CGAGTATGAC TCAATTCTCG CATTACGAGG ATTTTAAACA TAACGGTT 1078

(2) INFORMATION FOR SEQ ID NO: 662:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1398 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 662:

15	AACCTGCTTT TTAGTATCTA CGTTAATATT AATAGCTTTA ATTTCACTTG TATTAATTAA	60
	ATCAGCTGTG TAAATACCTG CTTTCAAATC GATAACTTTC TTTGTTCCAT TTTTAAAGTA	120
20	AACAGTATAT TTCGCTTGCT TCGATAGTCT TAAATCTATA TCACTAATAC CTCTGTCTGA	180
	TTTTAAACT GATTAACTC TATCCTCTAA ATCTTTATAA CTAATATTTT GATTCTTATT	240
	AAATGTTAAG CTGATAAAA TATTTTGGCT TGTACCGTTC ACAGTGaTTG CATATGGAAC	300
25	ATGGACTTTA GAATATCCAT GGTGTAACGA ACTTGATGAT TTATCTAATG GCTTAGCTGC	360
	GGCAGACGCT TCATTATTAT TAAAGTTTGC ACCTGTTGAT GCTAAAACAC CTAATGCTAA	420
	AGTTGTTGTA ATCAATGACT TAAATTTTCAT AAATTATCTC TCCTTTTTTG TGTAATTCGT	480
30	ATTTGCAACT TAATTATAGC CAGACTTTCT CTATTTTTTG AATTAAGTGA ATATTAATAA	540
	TAAATTATCT TTAACAATAA TTTTTTAAACA CTGTTAAAAG TTCTTTTAAT TTTGATTAAAC	600
	TAATTAATTT ACAATACCTA AAATGTTGTT TGGTTTTGTT TATACCAAGC TTCAAACCTA	660
35	AATGTCATAA CAACATTCAT TTCTTAATTC CTATTAGATT TGTCGATTAT ATTTACAGCA	720
	TCTTTTAACT CAAAAAACAT TTAAGTAAAA ATATAAATTC GATTTAATAA TTAATTTAAA	780
40	TTTAGTTAAT CAATTTTGCA TCTATTTTGT TGTAAGCTAT ATAAAAGGAG TGATAATGAT	840
	GGTGAAAAAA ACAAAATCCA ATTCACTAAA AAAAGTTGCA ACACTTGCAT TAGCAAATTT	900
	ATTATTAGTT GGTGCACTTA CTGaCAATAG TGCCAAAGCC GAATCTAAGA AAGATGATAC	960
45	TGATTTGAAG TTAGTTAGTC ATAACGTTTA TATGTTATCG ACCGTTTTGT ATCCAACTG	1020
	GGGGCAATAT AAACGCGCTG ATTTAATCGG ACAATCTTCT TATATTAAAA ATAATGATGT	1080
	CGTAATATTC AATGAAGCAT TTGATAATGG TGCATCAGAC AAATTATTAA GTAATGTGAA	1140
50	AAAAGAATAT CCTTATCAAA CACCTGTACT CGGCCGTTCT CAATCAGGGT GGGACAAAAC	1200
	TGAAGGTAGC TACTCATCAA CTGTTGCAGA AGATGGTGGC GTAGCGATTG TAAGTAAATA	1260

CAACAAAGGC TTTGTTTATA CAAAATAGA GAAAAATGGT AAGAACGTTT ACGTTATCGG 1380
TACACATACA CAATCTGA 1398

(2) INFORMATION FOR SEQ ID NO: 663:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 1200 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 663:

TTGTAATTGG AACGTACGAA CTTTTCTAGG TAAGAAACGT CGAATCTCGT CCTCATTATA 60
ACCAACTTGT AGTCGTTTAT TATCTAAAT AATTGGACGA CGTAATAAGC CAGGATTATC 120
TTGAATGATT GAATATAAGT CTTGTAATGG TAGTGAATCA ATATCAACAT TTAATTTTGT 180
GTATGTTTTA GAACGTGTAG AAATGATTTC ATCAGTACCG TCTTCAGTCA TTTTAAATAT 240
TTGCTTAATT TCATCAATTG TTAAATGTTT AGAAAAATA TTACGCTCCG TATACGGAAT 300
GTCCATGTTT tTGkTAACCA TGCTTTCGCT TTTACGGcAA GATGTGcAaC TTGGtGaAGT 360
aaATAATGtT ACCATACATC TCACTCTCCT ATTTGAATGA ATAAAATTCA TTGCTTAAAA 420
TTTAGTTATA GATCAAGAAA AACATTTTTT TTCTAAAATT CTTAATCGTT ACTATTTATT 480
ATAACTATCT AACATTAAAA TTAAATGAGA AAAACCTAAT TTTTCAGATA AGTTTCTACA 540
CTTATAAAAA AGATTATTAA TCCCTTTGTT AGTAGTAAGT TATACGTATA TTCTAACACA 600
TCTTACATTT TTAAGAAATA CTGTTATAAT GATAATTATT AAAATATTAC TAAGAAAGTA 660
GGCATTTAAA TGGAGACATT ATTTTCAGGC ATCCAACCTA GTGGAATTCC TACTATTGGA 720
AATTATATTG GCGCACTAAA ACAATTTGTT GATGTGCAAA ATGACTATGA TTGTTATTTT 780
TGTATCGTAG ATCAACATGC AATTACAATG CCACAAGATC GTTTAAAATT ACGTAAACAG 840
ACCAGACAAT TAGCAGCGAT TTATTTAGCT TCTGGTATAG ATCCAGACAA AGCAACATTG 900
TTCATACAAT CTGAAGTCcC TGCACACGTA CAAGCAGGAT GGATGTTAAC TACGATTGCT 960
TCTGTTGGAG AATTAGAGCG TATGACGCAA TACAAAGATA AAGCTCAGAA AGCAGTTGAA 1020
GGTATACCTG CTGGTCTATT AACATATCCA CCTTTAATGG CAGCTGATAT TGTTCCTTAC 1080
AATACTAATA TCGTTCCAGT TGGAGATGAC CAAAAGCAGC ATATCGAATT GACTCGTAAC 1140
CTTGTAGATA GATTTAATAG TCGCTATAAT GATGTGCTTG TGAACCTGAA ATTCGTATGC 1200

(2) INFORMATION FOR SEQ ID NO: 664:

(A) LENGTH: 787 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 664:

10	TGTACCTTTT GCTTTAATAA ATACTGTTTC TTTATCATAA TTAGGTTTCAG TTAAGAAATT	60
	AAATGTAAAG CTTTGAGTAA TATTTTTTTTG ACTATCACTT GTTGTAGCTG TACGTGTATA	120
	CATTTTAGTA TCACCATCAA GATTCTTCTC AGAAACTTGT TTGATTTTCAG AATTAATCTT	180
15	TGCAAATGAA GTAGCTGGTA ATACAGTGAA AGTAGTCGAT AGTGCTAAAG wACAAATTGT	240
	GATATTTTGA CATAGTTGTT TAATCATTAG TAATCCGCC TTTCAATATT ATCCTTCTTT	300
20	ATAAGGTTTA TTGTCATCAG AATATTTATC AACGACTTTA ACTGTTTTAT TTTCCAATC	360
	AACTTCATAA GTGACAATTA ATCTTTGACC ATCTTTATTT TtctCTAAAA TTGGAGGTGC	420
	ATAATGTATy CCAGGTCTGT TTTTCAAAT ATCTTGATTT CGTGTGTATG TTACTTCAAA	480
25	TTGCGTTTTT TCATTTGACT TTTCAATTAGA TAAATAAGTT AAAAATTCTG GATTAAAGCC	540
	ACTTCTTACT AATGCTGGGT ATCTATATTT TGAAGCAAAG CTTAGTTCaG GGTTTTCTAC	600
	AGTAGCAATT CTCGTATTTT TATAGAATAA TAATTCATCA TTTCTATTTT TCACTTCTCC	660
30	ACCATACTTC AAGTCATTCT CAATAACTGA CCAGTGATCA TGgCCAGTTn ATTTATTTTT	720
	ACCGCTGGCA ATTGTGTCAT AATTTGCTGC ATCATCAACT AATCGTTTTG GAAGTAGCTA	780
	TTTGCTG	787

35

(2) INFORMATION FOR SEQ ID NO: 665:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 533 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 665:

45

50

55

	TTATCTGTCA TTAACCACTG GTACATGTGA ACCCGGCnTn AATCAATATA TATATTTAAA	60
	AGCAAAGGCG CGCCATGTGC CTTTtTTnTA tTTTGATAT CTGTATCAAA ATCGATTTGA	120
	TTAAAATCCG CTTTATTTTA TCATCTATTC AAATGATTTT AGTGCGCTTA TTTTACTATG	180
	GCATTATTGC CTAACCTGTT TGAGATATAT TAATATTTGA TGATTCGTAT TCAAAGTTTT	240
	CATTTAACAT GTATTTAGTA TCATGATAGC TGCTTCATTG ATGATATACT ACCTACTTTT	300

CAGAGGCAAT ATTGAACAAT TCTTCATCAT GACTATTTTC CATCACATAA CTATGCTTAG 420
 CGAACGCTAA CATATCTTTA TCATTATTCG CATCTCCGAA GGCCATGAGC TCTGAAGGAG 480
 5 ACATTTCCCA TTTATCTAAC AATCGTTTTA ATGCCTGnCC TTAGTCATG TTT 533

(2) INFORMATION FOR SEQ ID NO: 666:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 666:

GACTTCTCTT GCACTAAAAA TTGCTCAAAT TGCTCGCTGT CATAACCAGG CGGTGTTTCC 60
 20 AACCATACAT ATATGCCACC TTTAGCATGA ACAAATGGCA AATCAGCTTT TGCAAGCATG 120
 GCTTCGAATC GGTACGACG TGTTTTAAAT ACATTGCTTT GTTCTTCTAA AAAATCATCA 180
 25 TAATGGATTG AAAGCATATA TTGCGGTCAT CTGTAAATG CACCAAACAT CCCAGCATTT 240
 GTGTGCGTTT GGTACTTTTT CAAAGCTTGA AATCATATCT TTATTACCAA CTGCCAAAAC 300
 CGACTCTGAA AACCTGGACA TGTGTATGAA CCTTnAGAC AAGGGAAGAA ATTTGCAATC 360
 30 GCAACATCTT TGCCCATTTT nCCGAAGCAA GTGnGACTAG 400

(2) INFORMATION FOR SEQ ID NO: 667:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 667:

TCTCCAATGC TACTCAAATT AAAAAGGTTT TAAATATTGT TAATTCTGAT CCAGAGCGAA 60
 45 AGATTGTTAT CGTTTCTGCT CCAGGTAAAA GACATGATAA TGATATTAA ACAAAGGATT 120
 TGTTAATCAG ATTATATGAA AAGGTCATTA ATCATCTTGA TTATCATGAT AAAAAAGAG 180
 AAATTATTCA GCGTTATGAT GATATTGTAA AAGAATTGCA AATGGATGAA AGTATTTTAC 240
 50 GGACGATAGA TGTGACTTTG GAACATTATA TAAATCAATT AAAAAATGAA CCAAAGAGAC 300
 TATTAGATGC ATTACTTTCT TGTGGTGAAG ATTTTAATGC GCaYtGAtA GCyTTATATA 360
 ATAAtAGTCa gGTtACCAAC AAmAtWTATA TCCcCGAAGG AAGCGGGTAT TT 412
 55

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 668:

TTACTCGTTA AAGATATTGT AAAAGATGAA GTGACAGAAT ATGACATTCA TCAAATGTTA	60
CCGCATCCGA TTAATATGGT AAGGGTTAGA CTTTTTGGTG TGAAATTAAA AGAGATTATA	120
GCTAAAAGTA ATAAACAAGA nTATATGTAT GAACATGCAC AAGGTTTGGG TTTCAGAGGG	180
AATATATTTG GAGGATATAT TCTTTATAAT TTAGGGTACA TTCATTCTAC AGGGCGTTAC	240
TATCTGAATG GAGAAGAAAT CGAGGACGAC AAGGAATATG TACTAGGTAC GATAGATATG	300
TATACGTTTCG GTCnTATTnc CCAACATTGA AGGATTACCA AAGAGTATTT AATGCCAGAG	360
TTTTTCAGAG GTATATTTAA nGAAAATTAT TGGCTATTTA	400

(2) INFORMATION FOR SEQ ID NO: 669:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 1236 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 669:

TGTTTCGATAT TTTTAAATTT ATCTTTTAAA TACAACAACT GTTTCGGTAA TGATTTAACT	60
GTTTTATGAC TAATGCCATT GAATATTTCT AGCGTTTAT TTAACCTATC GATAATCGCA	120
TGTAAATCCT TCAAAATGTC TTTTGTTCa AAAGTAAATA CATTATGGAA GCGATGAATA	180
TCATCATCAT AAACATCAGA ATCATTGATA ATCGTAAATA TCGTTGAGAA CAATTGCTCA	240
TTTAACTCAT GAATCTCATT CATACTAGCC TTCAAGCCAA AAATATCAAT TGGTGCAATA	300
TCTAATTTTT CCAAAATTCG CTGCTTTTCC AGTTGATCAA TTGCCTTTAA CAATTTTTCA	360
TTTTCGTTTT TACCAATCAA ACCAAGCTGA TATTTAATAT CAGCATAACT CAACTCATTT	420
GTCACCTGAT TTAAGGCATA GTCTGGTAAG CGATGTGCTT CATCCACTAT ACAATCATCA	480
AACAATTGAT ATATTGAATT TTCAACATCA GAATGaATTA AATGTGCATG ATTTGTAATA	540
CCAATTTGaA TGTTCTGTGC ATTTGCTTA ATAAAATTAT aATAATGAAC ATCGTGACGT	600
GCCGGTACAT ATGTTTCAAT TTTCTGGTca AAATACATCT TTTGACCACC TTTTAAATTT	660

ATATTCACtT CGTAATTACT TGTGTCATCT TTTAAAATTT GACTAATAAG CCCCAATGAA 780
 ATGTAATCaC TTtTACTTTT AATCAATAGT GCATTAATTT TAAAATTCAA CGCTTCATTC 840
 5 ATTGCTGGAA TATCTTTTTC TAACAATTGA CTTTGCAGTA ATTTAGTATT GGTAGAAATC 900
 ATGACATGCT TCCCAGTTTC AATATTATAC ATCAAGGCCG CAAGTAAATA TGCTAATGAT 960
 10 TTACCACTGC CTAGTGATGC TTCAATCATT GCTTTTTTCAC TATGCATGAG CTGATCTAAT 1020
 ATAGTTTCCG CTAAATATAA TTGTTGCGGT CGATATGTTA AGCCAAGTTG ATCTACAGCT 1080
 TTGCTATATA AAGACTTCAA GCTGCCATTA TAATTTGTTG TCGGCTTTTT AAAATCAACT 1140
 15 TGCTTACGAT AGATAATCTG TTCGAACTTT TCGTACGATT TATCCAATGG CTTTGCATCA 1200
 TATTGCCTAA CCATCTCAAA GAAAATATCA TACAAA 1236

(2) INFORMATION FOR SEQ ID NO: 670:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 1819 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 670:

30 ACAsAATTAT TGACCAATAT GACTCGTGGA CTGATATGTT TAAAGCACTA CTGCATGAAA 60
 CATTTAAAGC ATATGGCGTT CTATTTATAG ATGCGCAGTT TGAGCCGTTA AGAAAAATGG 120
 AAGCGCCTAT GTTTAAAAAG ATTTTGAAAA AACATCAGTT GCTTGATGAT GCTTTTAGAG 180
 35 CAACACAACA ACGTACTCAA AATCAAGGCT TGAATGCGAT GATACAAACA GATACAAATG 240
 TTCATTTATT CTTACATGAT GAAAATATGC GTCAATTAGT tTCGTATGAT GGTAAGCAyT 300
 TTAmATTAAA TAAACAGAT AAGACATATA TAAAGGAAGA AATTATAAAT ATTGCGGAAA 360
 40 ATCAACCKGA ATTATTTTCT aATAATGTAG TGACAAGACC ATTAATGGnA GAATGGTTAT 420
 TTGAACACGG TGGCATTGTG TGGAGGACCG AGTGAAATTA AGTaCTGGGC TGAACATAAA 480
 45 GATGTATTTG AACTATTTGA TGTTGAAATG CcAtCGTGA TGCCAAGGCT TAGAATTACT 540
 TATTTAAATG ACCGTATAGA AAAATTACTT TCGAAATACA ATATTCCATT AGAAAAAGTG 600
 TTAGTCGATG GTGTTGAAGG AGAAAGAAGT AAGTTTATTA GAGAACAAGC ATCACATCAA 660
 50 TTTATTGAAA AGGTAGAAGG TATGATTGAA CAACAGCGTC GTCTAAACAA AGACTTATTA 720
 GATGAAGTGG CGGGGAATCA AAATAATATT AACCTTGTTA ATAAAAATAA TGAAATTCAT 780
 ATACAACAGT ATGATTATTT GTTAAAACGT TATCTTTTAA ACATTGAAAG AGrAAACGAC 840

	GAAAGAATAT GGAATCCACT TCAAATTTTG AATGATTTTG GGACAGATGT GTTCAAGCCC	960
5	TCCACCTATC CACCACTTTC TTACACTTTT GATCATATTA TTATAAAACC TTAATATACC	1020
	AAGGGTTTAG CCCGATTTAT CTTAATGATA AATCGGGCAT TTTTTTGTTT TTTAAAATAA	1080
	ATTTACAAA TTTTGTATAA ATAGTGGTGG ATAGTGGGGA GATGTGGTAA ATTATATATA	1140
10	AGGTGAGGTG ATAAAAAATG TTCATGGGAG AATACGATCA TCAATTAGAT ACAAAGGAC	1200
	GTATGATTAT ACCGTCCAAG TTTCGTTATG ACTTAAATGA GCGTTTTATT ATCACAAGAG	1260
	GCCTTGATAA ATGTTTATTC GGTACACTC TAGACGAATG GCAACAGATT GAAGAGAAAA	1320
15	TGAAAACCTT ACCTATGACA AAAAAAGACG CACGTAAGTT TATGCGTATG TTCTTCTCTG	1380
	GTGCTGTTGA AGTAGAACTT GATAAGCAAG GCGGTATTAA CATCCCTCAA AACTTGAGGA	1440
	AATACGCTAA TTTAACTAAA GAATGTACAG TAATCGGTGT TTCAAATCGT ATTGAGATT	1500
20	GGGATAGAGA AACTTGGAAT GATTTCTATG AAGAATCTGA AGAAAGTTTC GAAGATATTG	1560
	CTGAAGATTT AATAGATTTT GATTTTTTAA ATGGAGGAAT TGAAGTGTTT CATCATATCA	1620
25	GCGTTATGTT AAACGAAACC ATTGATTATT TAAATGTAAA AGAAAATGGT GTGTACATTG	1680
	ACTGTACGCT AGGTGGAGCG GGACAGCCC TTTATTTACT AAATCAATTA AATGACGACG	1740
	GAAGATTAAT AGCAATCGAT CAAGACCAA CTGCAATTGA TAATGCTAAA nGGGTATTAA	1800
30	AGGATCATTT GCATAAaG	1819

(2) INFORMATION FOR SEQ ID NO: 671:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 609 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 671:

	ACCAATTATT GGACAGGAAT TAGCAAAAAA TGCAATGCTT GCATTAATCT ATGCATCGAT	60
45	AGGTATCATC ATCTATGTAT CATTACGATT TGAATGGCGC ATGGGTCTTT CATCTGTATT	120
	GGCATTATTA CATGATGTAT TCATTATAGT AGCGATTTTC AGTTTATTTA GAATTGAAGT	180
	AGATTTAACA TTTATCGCCG CTGTATTAAC AATTGTCGGT TATTCAATTA ATGATACAAT	240
50	CGTAACGTTT GACCGTGTAC GTGAAACTT ACAAAGGTT AAAGTGATTA CGACAACAGA	300
	ACAAATTGAT GATATCGTTA ATAGATCAAT TAGACAGACA ATGACACGTT CAATTAATAC	360
55	AGTATTAACA GTTATTGTAG TAGTAGTTGC TATACTATTC TTCGGTGCTC CTACGATATT	420

TGCCGTTCCG CTATGGGGAA TAATGAAAAA ACGTCAGTTG AAAAAATCGC CGAAACACAA 540
 ATTAGTTGTA TATAAAgAAA AGAAATCGAA CGATGAAAAG ATTTTAGTTT AAAAtGaATT 600
 5 AAGCGGTAT 609

(2) INFORMATION FOR SEQ ID NO: 672:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 2222 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 672:

CTTAAACAG CAATTTGAAC GTTTACAAAA TGAACAAATC TTTGTTTATG TTTGTCATGG 60
 20 TAATCACGAT CCTTTATCAT CAAAGATTTC ATCAAACCTGG CCAGATAATG TtntTGTATT 120
 TTCAAATAAA GTTGAGACGT ATGAAGCAAT TACTAAATCT GGTGAAACAA TTTATATTCA 180
 CGGATTTAGT TATGAAAATA GAGCAAGTTA TGAGAACAAG ATTGATGAAT ATCCATCAAG 240
 25 TCAAGGCCAA AAAGGCATAC ATATTGGTGT CTTGCATGGT ACGTATAGTA AATCTTCAGT 300
 TAACGAAAGA TATACCGAGT TCATTTTAGA AGATTTAAAC AGTAAATTGT ATCATTATTG 360
 GGCTTTAGGT CATATACATG AACGTCAACA ATTAAGTGAT ATGCCTGTAA TTAACATTTC 420
 30 AGGTAATATT CAAGGTAGAC ATTTTAATGA GCAaGGTGAA aAAGGTTGCT TATTAATCGm 480
 GGGTGACCAC TTAATAATTAA AGACTAAATT TTATCCTACA CAGTATATTA GATTTGAAGA 540
 35 AGCAACTATT GAAACGGATA AGACATCTAA GCAAGGTTTA TACGAGGTCA TTCAAACCTT 600
 TAAAGAACAA GTGAGAGAAG AAGGAAAAGC CTTTTATCGT TTAACGCTTG TTATTAATAG 660
 TGAGACATTA ATTTACCTC AAGATTTATT ACAAGTTGAA GAAATGATTA CAGATTATGA 720
 40 AGAAAACGAA AATCAATTTG TATATATTGA TGAGTTAAAA ATACAATATG CACAAAATGA 780
 TGAGTCACCT TTAGTTAATG AATTTTCAGC GGAATTATTA GTCGATCAAA CTGTTTTTGA 840
 TAAAGCGATG TCAGATTTAT ATTTAAATCC AAGGGCATCT AAGTTCCTAG ACGATTATGG 900
 45 AACATTTCGAC CATAACGAT TAGTTAATCG TGCTGAAGAA ATATTAAAAG CTGAAATGAG 960
 AGGTGAACAA AATGATAATT AAATCACTTG AAATTTATGG TTACGGTCAA TTTGTTCAaC 1020
 50 GTAAAATTGa ATTTAATAAA AACyTcaCTG AAATTTTTGG TGAAAATGAA GCGGGTAAAT 1080
 CGACGATTCA AGCATtCATC CATTCGATAT TATTTGGATT TCCAACTAAA AAGTCTAAAG 1140
 AGCCAAGACT AGAACCACGT CTAGGTAACC AATACGGTGG TAAATTAGTA CTTATTCTTG 1200

	TATATTTACC TAATGGTGCT GTGCGTGATG ATGCTTGGTT AAAAAAGAAA CTTAATTATA	1320
	TTTCTAAAAA GACATATCAA GGTATCTTTT CATTTGATGT ACTAGGGCTT CAAGACATTC	1380
5	ATAGAAATCT AAATGAAAAA CAATTGCAAG ATTATTTATT ACAAGCmGGG GCTTTAGGAT	1440
	CAACTGAaTT CACGTCAATG CGCGAAGTGA TTAATCGTAA AAaAGATGAA TTATATAAAA	1500
10	aATCAGGTAA AAATCCGATC ATTAATCAAC AAATTGAGCA ATTAAAACAA CTAGAAAGTC	1560
	AAATTCGTGA AGAAGAAGCA AAGCTAGAAA CATATCATCG CTTAGTAGAT GATCGAGATA	1620
	AATCATCAGC TCGATTAGAG AATTTAAAGC ATAATTTAAA TCAATTATCA AAAATGCATG	1680
15	AAGAAAAACA AAAAGAGGTT GCTTTACATG ATCATTCAACA AGAATGGAAG TCTCTAGAAC	1740
	AACAGTTAAA TATTGAGCCA ATCACATTCC CAGAAAAAGG TGTGGATCGT TACGAAAAAG	1800
	CACGAGCGCA TAAGCAATCG TTAGWAAGAG ATATTGGTTT AAGAAATGAG CGTTTAGCTC	1860
20	AACTTAAAGA AGAAGCGACT CAATTAGAGC CAGTTAAACA ATCTGATATT GACGCCTTCA	1920
<hr/>		
	TTAGTTTGAA TCAACAAGAA AATGAAATTA AAAATAAAGA ATTTGAAC TT ACTGCAATCG	1980
25	AAAAGGATAT TCGCAATAAA CAACGTGATA AAGATGAATT GCAATCAAAT ATTGGTTGGT	2040
	CTGAAACGCA TCATGACGTA GATAGTTCAG AGGCAATGAA AAGTTATGTC AGTGAGCAAA	2100
	TCAAGAATAA ACAAGAACAA GCTGCATACA TTAAACAATT AGAACGTAGT TTAGAAGAAA	2160
30	ATAAAATCGA AGATAATGCG GTTCATAGCG AACTAGATTC TGTGAAGAA AAATAGTTCC	2220
	TG	2222

(2) INFORMATION FOR SEQ ID NO: 673:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 406 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 673:

45	TTGCAGGTAT CATTTTTTTA ATGCCATATG GATTATGTTT TCTACCGTTT TATAAGCAAA	60
	AAAAGAAAAA ACAGACATTT AAAAAATACA TGGTTTACAC TACGATTGGT TTGTCAATTT	120
	GTCTAGGCTT ATCTCTAGTT TTGGTTCACA CTACGAAAAT TTATATGGAC GAAGGTGGCG	180
50	TAAGATACTA TTACGGTAGT TTTGTAATGA AACAAGCGGG CGGTTATGCT TATTAGCTT	240
	TAGCGGTACT TTCAACGTTG TTAATTGTTG CGAAAAAGC TACAAATAAA AATAAAGAAA	300
55	TCGAAACCGT CGACAATACA AATATAACGG AAAGATAATT AAGGGAGTGC TCATTCAGGA	360

(2) INFORMATION FOR SEQ ID NO: 674:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 927 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 674:

```

CCACTTTGTG GATTTTCTTT ATATTCTCCA CGCTTGtACT ACAACTTCTT TCGTTTCTGT      60
TTCATCACCG ACTGCCGCAT TCGTTAGCAC ATGTAATAAC TCTTTTGCGG TTAATACATT      120
CTCATCTATA ATCTTATCTT TTTGTTCTTG TATATATTGC TTGATGTGCG GCTTTTTCAA      180
TAACCTACAC GCTGTCACAT GTGCGCTATT TGCGTTATAT CCTGyTTTtA TGGCACTTTG      240
TGTTACATTC AGTGTtCTAA TATACTCATT CACAAAACGT GCTTGCTTTG CAGTTAACTC      300
ACTCATTTTA TCACCCCCAC AATTTTATCT AATATGGTTT CATACCATAA TATTACAGAT      360
TGTtCTGAAC AATCTAAGGC ACTACTAATA TCTTGATAAC TAAGTCCTTG TATAAGGGAG      420
TCAAAAATAT AAAACTCTTT ATCGGTCGCT AATCTGTCAA CAATCATtTC TATGTGATTc      480
TTTATAATAT GATCATTGAC ATTATCGTCT GTCATCAATT CGTCAGAATC TTCATCACCT      540
ATTAAAAAGA AATCATCAGT ATTTATTTCA TCATCGCCCC GTTAACTAGC TTTGAAGTCT      600
TTAGCACACT TGCATATACC GGCTGTCGTG CTGGCKAGAT ACTAGCATTG AAGTGGTCTG      660
ATATTGATTT TGAAAACAAC ACGATTAGTA TTAATAAAC ATATTACAAT CCAAATAATA      720
ACAAGAAGAA ATATCAGATA CTTCCCCCTA AAAGTAAAG TTCTATCGGT AAGATTTCCG      780
TTGACCCAAA TGTAATAAAG GtGtTGCgtG ATTATAAGAT AAACGTTCAA AATAATTGGA      840
AAAACGAATT ATATAATGAT AACCATTGTA ATGAAAAAAC TATCAATGTG GATACAAACC      900
ATTATGTCAC GTACCAGCAT ACTCAA                                     927

```

(2) INFORMATION FOR SEQ ID NO: 675:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1100 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 675:

```

GATGTTAAnA TAAGTACATC ATTTTGACTC CCAAATATTG GCTTTAGACC TTGAAATGCT      60

```

	CTCATAATGG CATCAGGTAC cAGGGGTTGG GaCCAGGTGT TAATAACAAC GGTTGATGAT	180
	AATACATTTA TATGCCTCCT ATAAATAAGA TTTCATTATT TTAGCAAATT TTCTGAAAAT	240
5	TTAAAAGCCT AAAAAGtGAT AACGCTATAT TGTCGAACAA ACGTTATCAC TTAACGATTT	300
	TATTTGGCCT GAATGATGGG ATAGATTTTT ATGTCCACAT TATTTCTTAC AGCATTTGAA	360
10	ATCATGCAAT TATTATCTGC AATTGTTATC AATTTTGGTA ATCGCTTTTC TAATTGTGCT	420
	ATTTGATCAC TTGGAATTTG AATTGAGGA TGGTGCACAA TTTTGGACAT ACTGAATTTT	480
	CCGTTATTTA AACAAGCTGT TCCAATCGAT TGTGTGkCAA TTGAAATATC TGTGAACCTT	540
15	GCACGTTCAA GAGTAGCTGC TAATGAGATG ATATAACATG ATGAAGCGGC TGATACTAAC	600
	ATTTTCATCGG GATTTGTTCC TATACCAACA CCACCTAAAG AAGCAGGTAT AGAAATATTC	660
	TCTGAAAGTA TGTCGCCTTG AACGTTTCCG ACATTGTTAC GACCACCTTG CCAAGAAAGTT	720
20	TGGACTTTAA AGTCATGTTG ATGCAATTGC TTTAACCTCC AATATAATTG TGATAGTTTA	780
<hr/>		
	ATTTTAGAAT AGTTTATCAA AGTTTAACAG AAAGGTGACT TATCAATGAC TCTGAATAAA	840
	CTGAAAGATG AATTACAAAT TGTTTCGCAC CGTGGATTGC CGAGTGATTT TCCTGAAAAT	900
25	ACAATGGTCG GTTATCGAGA GGTAAATGGGG CTCAATGTTG CTATGTTAGA AATAGATGTT	960
	CATTTGACCA AAGACCAACA TTTTGTGTG ATACATGaTG AAACAATTGa TAGAACATCG	1020
30	GaTGGLaRGG GGCCTAWTGc TGaTTACACA TTATCGCAAT TAAAATCATT TGATTTTGGT	1080
	AGTTATAAAG ATGTTGCTTT	1100

(2) INFORMATION FOR SEQ ID NO: 676:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 460 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 676:

	ATTAATTTCA TATGGAAATA GTTGAACATA CTGCGCTGTA TAAGCTTCAA CAGTTTGATG	60
45	AATTAACGAT TGATCTTCAA TATATCCGTA GAACAAATCT TCAGTACAAA CTACTTTACC	120
	TTTATCAGGT TTAATTGCAC CTGCCAACAA TTGACCTACC AACGCTTTGG AAGATTCAGG	180
50	TTCACCAATT ATACCTAATG CTTCTCCTTG ATAAATATGT AAACATAATAT TGTTTAAATC	240
	GATATCTTCA GCATCATATC CAAAAGGTAA ATACCATTTC TTATTCTGTT TATTCCTATA	300
	GTAGTGTGTT ACTTTTAGTA ACTTTAAAC AATTGAACTT CCCATCTATT TTCATCCTTC	360

CCCCACGCaa AAATACCTTT TAATCTTnCT ACTTTAAAAT

460

(2) INFORMATION FOR SEQ ID NO: 677:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1451 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 677:

15	GTCAAGTTTT CGGCTAGATT TTAACGCTC ATCACTATGT AGAATGAAAC TTTCGAAAAA	60
	CTGTAAATCA TCATAACCTT TTACATAAAC ATAACCTTCG CCACCAATTG CTTGAATTAA	120
	ACATTGGGCG GCCATTTGAA TTTCTAAAGA TTGTTTTTCT AGCCTATTAA AGATACCTAT	180
20	TAGTTGTGTG TTTAAGATTT TTGACATCTT TATCCTCCAA TCTACTTATA AAATATTGTA	240
	ATTAATGACT ACATATTATG CAACGGCTTA AATTGTATAA AAATGTATAC GTTTGCATTT	300
	AGTATAACTA TCGCATTTTT CAAAAAATAC ACATTTAATC TGCAGTATTT CAATGCATTG	360
25	ACGCTATTTT TTTGATATAA TTACTTTGAA AAATACGTGC GTAAGCACTC AAGGAGGAAC	420
	TTTCATGCCT TTAGTTTCAA TGAAAGAAAT GTTAATTGAT GCAAAGAAA ATGGTTATGC	480
	GGTAGGTCAA TACAATATTA ATAACCTAGA ATTCCTCAA GCAATTTTAG AAGCGTCACA	540
30	AGAAGAAAAT GCACCTGTAA TTTTAGGTGT TTCTGAAGGT GCTGCTCGTT ACATGAGCGG	600
	TTTCTACACA ATTGTTAAAA TGGTTGAAGG GTTAATGCAT GACTTAAACA TCACTATTCC	660
35	TGTAGCAATC CATTTAGACC ATGGTTCAAG CTTTGAAAAA TGTAAGAAG CTATCGATGC	720
	TGGTTTCA CA TCAGTAATGA TCGATGCTTC ACACAGCCCA TTCGAAGAAA ACGTAGCAAC	780
	AACTAAAAAA GTTGTGTAAT ACGCTCATGA AAAAGGTGTT TCTGTAGAAG CTGAATTAGG	840
40	TACTGTTGGT GGACaAGAAG ATGATGTTGT AGCAGACGGC ATCATTTATG CTGATCCTAA	900
	AGAATGTCAA GAAC TAGTTG AAAAACTGG TATTGaTGCA TTAGCGCCAC ATTAGGTTCA	960
	GTTTCATGGTC CATACAAAGG TGAACCAAAA TTAGGATTTA AAGAAATGGA AGAAATCGGT	1020
45	TTATCTACAG GTTTACCATT AGTATTACAC GGTGGTACTG GTATCCCGAC TAAAGATATC	1080
	CAAAAAGCAA TTCCATTTGG TACAGCTAAA ATTAACGTAA AACTGAAAA CCAAATCGCT	1140
	TCaGCAAAAG CAGTTCGTGA CGTTTTAAAT AACGACAAAG AAGTTTACGA TCCTCGTAAA	1200
50	TACTTAGGAC CTGCACGTGa AGCCATCAAA GAAACmGTTA AAGGtAAAAT TAAAGAGTTC	1260
	GGTACTTCTA ACCGCGCTAA ATAATTAATA TTTAGTCTTT AAGTTATTAA TAACGTAGGG	1320

AATAAATAAA ACAGTTTGAT TTTAAATGA AAGCGTAAAA ATGGTAAAT ATATCAAAAT 1440
 TGATTGTGAT A 1451

(2) INFORMATION FOR SEQ ID NO: 678:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 668 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 678:

nGTATTGAAG CGGTTAAACA AACACCTAAT GCAACTGACG AAGAAAAGCA GGCTGCTGTT 60
 AATCAAATCA ATCAACTTAA AGATCAAGCA ATTAATCAAA TTAATCAAAA CCAAACAAAT 120
 GATCAGGTAG ACACAACCTAC AAATCAAGCG GTAAATGCTA TAGATAATGT TGAAGCTGAA 180
 GTAGTAATTA AAACAAAGGC AATTGCAGAT ATTGAAAAAG CTGTTAAAGA AAAGCAACAG 240
 CAAATTGATA ATAGTCTTGA TTCAACAGAT AATGAGAAAG AAGTTGCTTC ACAAGCATT 300
 GCTAAAGAAA AAGAAAAGC ACTTGCAGCT ATTGACCAAG CTCAAACGAA TAGTCAGGTG 360
 AATCAAGCAG CAACAAATGG TGTATCAGCG ATTAAAATTA TTCAACCTGA AACAAAAGTT 420
 AAACCAGCTG CACGTGAAAA AATCAATCAA AAAGCGAATG AATTACGTGc TAAGATTAAT 480
 CAGGATAAAG AAGCAACAGC AGAAGAAAGA CAAGTAGCAC TAGATAAAAT CAATGAATTT 540
 GTAAATCAAG CCATGACAGA TATTACGAAT AATAGAACAA ATCAACAAGT TGATGATACA 600
 ACAGTCAGCG CTgATAGCtT GCTTTAGTGA CGCCTGACCA TATTGTTAGA GCgCTGCTAG 660
 AGATGCGT 668

(2) INFORMATION FOR SEQ ID NO: 679:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1906 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 679:

GATCCAAATT TAAAAGGAAA AATAGCCTTT AACGAATTTA CGAAACAAA TGAATGTTTA 60
 GGGAAAGTGC CATGGAATAC TAATTTTAAG ACACGTCAAT GGCAAGACGG TGATGATAGC 120
 AGTTTAAGAA GTTATATCGA AAAGATTAT GACATACACC ATTCAGGTAA AACAAAAGAT 180

	ATCGTGGGAT GGACATAAAC GCCTTGAAAA GTTATTTATC AAATACTTAG GTGTTGAAGA	300
	CcTGaAGTGA ATAGAACAAC TACCAAAAA GCATTGACTG CTGGAATCGC TAGAGTAATG	360
5	GAGCCTGGAT GTAAATTTGA CTATATGCTT ACACTTTATG GTCCTCAAGG TGTAGGTAAA	420
	TCTGCTTTGC TAAAAAAATT AGGTGGTGCA TGGTTTTCTG ACAGTTTAGT TTCTGTTACA	480
	GGTAAAGAAG CTTATGAGGC CTTACAAGGC GTTTGGCTAA TGGAAATGGC AGAACTTGCA	540
10	GCTACAAGAA AAGCTGAAGT TGAAGCTATT AAGCATTTCA TATCTAAACA AGTTGACCGA	600
	TTTCGTGTTG CTTATGGGCA TTATATTGAA GATTTTCCAA GGCAATGTAT TTTCAATTGGT	660
15	ACAACTAATA AAGTTGATTT CTTAAGAGAT GAAACTGGTG GAAGACGTTT TTGGCCAATG	720
	ACTGTAATC CAGAGAGAGT TGAAGTGAAC TGGTCTAAAC TAACCAAAGA TGAGATTGAC	780
	CAAATTTGGG CAGAAGCTAA ACACTATTAT GAACAAGGAG AAGATTTATT CCTTAACCCCT	840
20	GAAGTAGAAG AAGAAATGCG TTCAATACAA AGCAAACATA CTGAGGAATC TCCATATACA	900
	GGCATTATTG ATGAATATCT TAACACACCG ATTCCtAGCa ATTGGGATGA CTTAACTATC	960
	TTTGAACGAA GACGATTTTA TCaAGGTGAT GTTGATATGT TACCcACAGG AAATGTaGAT	1020
25	TACGTTAAAA GAAATAAAGT CTGTGCGCTT GAAGTGTTTG TTGAATGTTT TGGTAAAGAT	1080
	AAGGGAGATA GTAGAGGATC TATGGAAATT AGAAAGATTT CAAACATCTT AAGACAAATTA	1140
	GACAATTGGT CTGTATATGA TGGTAATAAA AGTGGGAAAA TTCGATTTGG AAAAGATTAT	1200
30	GGGTACAGA TAGCTTATGT AAGAGATGAA AGTTTAGAGG ATTTAATATA AGAAATATTG	1260
	AATAAATATG CATTTTAGAG TGTTGTATCA GATGTTGCAT CATTTTTTGA GTGATGCAAC	1320
35	ACGGGAGTGT AAAAAGTAAT CGTAGGTGTT GTATCATTTT TGGTGATGCA ACATTGATGC	1380
	AACAAATGAT ACAACACCTC TTTCCTTTCT AGCTGTAGGG TTCAACCCTG TTTGTTTCCA	1440
	ATGTTGCATC AAATTCACCTA TAAAGTTTAA AAAGTAGTGT TAGGGAGTAA AGGGGTATAG	1500
40	GGGTAACCCT CTAACAGCTA TTTTAAAAAG TTTGGCAAGA ATTGATACAA CATCGGAACA	1560
	CAAATATAAA TTTTGTATAC AAGGTGAATA AATGAAAGAA TCGACATTAG AAAAATATTT	1620
	AGTGAAAGAG ATAACAAAGC TAAACGGTTT ATGTTTAAAA TGGGTCGCAC CTGGAACAAG	1680
45	AGGTGTGCCA GATAGAATTA TTATTATGCC AGAAGGAAAA ACATATTTTG TAGAAATGAA	1740
	GCAAGAAAAA GGAAAGTTGC ATCCTTTTACA AaAATATGTG CATAGACAAT TTGAAAAATAG	1800
	AGaTCATAAA GTATATGTGT TATGGAATAA AGAACAAGTA AA'ACTTTTA TCAGAwTGGT	1860
50	AGTGAACATT TGGCGATTGA CTTTCAAACC ACATAGCTnT CCAAAG	1906

(2) INFORMATION FOR SEQ ID NO: 680:

55

(A) LENGTH: 948 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 680:

10	AATTATTGA ATAAATTAGC AATTAAAGAG TTGATTGTG AGTTTAAGyA TTTGAGTGCA	60
	TTTGAAAAAG ATGTCATGTA TTTAATGTGT GAACAATATA AGCCGAGAGA AATTGCTCAA	120
	TTGATGCATG TAAAAGAGAA AGTGATTTAT AATGCCATAC AACGATGTtA AAATAAAATA	180
15	AAACGTTATT TCAAAATGAT TTGAAAAGCG CCTTAGGACG TGAATTGAAT TATAACGTGT	240
	TACTTACTGA TGGTTTGACA TTTGTTATAA ATTTTATGTA TAGTATACTG GTATTATAAT	300
	GAATAAAGGT GAATTATTGT GAGAAAAATA CCTTTAAATT GTGAAGCTTG TGGCAATAGA	360
20	AATTATAATG TTCCTAAGCA AGAAGGCTCG GCAACAAGAT TAACCTTAAA GAAATATTGT	420
	CCAAAATGTA ACGCGCACAC AATTCATAAA GAATCGAAAT AAATACATTC GAAATAATAC	480
25	TTTGATAATA TGTTCAAAGG ATTTGGAGGT TGAGCAGATG GCTAAAAAAG AAAGTTTCTT	540
	TAAAGGCGTT AAGTCTGAAA TGGAAAAAAC AAGTTGGCCG ACGAAAGAAG AGCTATTTAA	600
	ATATACTGTA ATTGTAGTTT CTACTGTTAT ATTCTTCTTA GTCTTTTCTT ATGCCTTAGA	660
30	TTTAGGAATT ACAGCATTGA AAAATTTATT ATTTGGTTAG AGGAGTGAAG ACATGTCTGA	720
	AGAAGTTGGC GCAAAGCtTG GTATGCACTG CATACATATT CTGGATATGA AAATAAAGTT	780
	AAAAAGAATT TAGAAAAAAG AGTAGAATCT ATGaATATGA CTGAACAAAT CTTTAGAGTA	840
35	GTCATACCGG AAGGAAGAAG GAAACCTCCA GTAAnAAGnT GGCCAAGCCT AAAACCGCCT	900
	GTAAAAAATA ACCATTCCCC TGGGnTAnGG TTTTAAGTGG GAATTTAA	948

(2) INFORMATION FOR SEQ ID NO: 681:

40

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 863 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 681:

50	ACAnATAATA ACAAAGCGCT TGCTAGTACC TCTTAAAAAG ATGATGCTAG CAAGCGCTTk	60
	TCTATACTAT ATATTATTTT TCTAAAATTT TAACACCCTC TTGAGTGCCT ACAATAACTT	120
55	GATCTGCCAT ATCTAAGAAG TATCCTGTCT CAAACACACC TGTCAGATGA ATTAAATACT	180

TATCAGTTAT AAATGCGACA TCTTCGTTTA CACGACGTTT TACTTTTATA TCAGCGTATG 300
 ATTCAATTTT ACGTAATATG TGATACCAGT TAAATTTATC CACCTCTACT GGTAACCTAA 360
 5 ACGTCTCACC TAAGTATTGA ACTATTTTCG TTTCATCGAC AACCACAACA AAACGCGATG 420
 CCATTTTCATC TATAACTTTC TCTCTGAACA GCGCACCACC GCCACCTTTA ATTATATTTA 480
 AAGATGGATC TACTTCATCA GCACCATCAA TTGCTAAGTC GATATGATCA ACATCATTGA 540
 10 TTTACATAT TTTAATACCT AATTCCTTTG CTAAAAATGC AATTTTATTA GAAGTGCATA 600
 CACCTGTAAT ATTGTAACCA CGTTCCTTAA TTAGTTGCGC CATTTGAGGT AAGAGTAATT 660
 15 CCATTGTAAT TCCTGTACCA ATTCCCAGCG TCATGTCACC ATTGATTkGA CTAAAAACAT 720
 CATTTAATGT CATTAACTTG AGTGCTTTGA CATCTTTCAT GAAGGTAGCC TCCCATATTT 780
 AAGTAATCTA TTCAATTCAT ATTTTACATG ACTCGTATAA ATTAACATAC CCTTATnGCT 840
 20 AACCATTGTG GTTAAACATA TCG 863

(2) INFORMATION FOR SEQ ID NO: 682:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 480 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 682:

TTCATTTTGT TTGTTGACGA ATTTTGGTCC GAATTTCAAT TCATCAGATG ATAGCTCTAT 60
 35 TAATTCTGTA GAATATTCTG CtACAACAAT TTCATAAATA TGGCCTTTTT CTCCATTAT 120
 TATTTTCATCa ATTATTTTCAT AATTCAATTG TTGTAATGTT TGTCTTAAAT TTTCAGTTTG 180
 GATATTACTT TGTAATAATCA ACCTTGGATG TTGACTTAAAC TTATCTTGCC CATCTTTTAA 240
 40 AATTTTAGCA ATAAGTGGTC CGCCCATACC ACAAATTGTG aTATTATCGA TTACGTCCTC 300
 AGGTGAATA ACACCTAAGC CATCCCCTAA ACGTACATCA ATTCTATCTA CTAATTGGTT 360
 TGCAGCTACA TTTTTCACAG CAGCTTGAAA AGGGCCTTGA ATAACCTTCTC CAGCAATAcc 420
 45 GaTTCCGATA AATGGTTTTG AATTGCATAG ATTGGCAAAT AAGCATGATC TGAGCCAATA 480

(2) INFORMATION FOR SEQ ID NO: 683:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 689 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 683:

CTGCAAAAAA TATTGGTATA ATAAGAGGGA ACAGTGTGAA CAAGTTAATA ACTTGTGGAT 60
 5 AACTGGAAAG TTGATAACAA TTTGGAGGAC CAAACGACAT GAAATCACC ATTTTAGCTG 120
 TAGGGAAACT AAAAGAGAAA TATTGGAAGC AAGCCATAGC AGAATATGAA AAACGTTTAG 180
 GCCCATACAC CAAGATAGAC ATCATAGAAG TTCCAGACGA AAAAGCACCA GAAAATATGA 240
 10 GTGACAAAGA AATTGAGCAA GTAAAAGAA AAGAAGGCCA ACGAATACTA GCCAAAATCa 300
 AACCACAATC CACAGTCATT ACATTAGAAA TACAAGGAAA GATGCTATCT TCCGAAGrTT 360
 15 gGcCCAAGAA TTGAACCAAC GCATGACCCA AGGGCAAAGC GACTTTGTTT TCGTCATTGG 420
 CGGATCAAAC GGCCTGCACA AGGACgTCTT ACAACGCaTA ActACGCACT ATCATTGAGC 480
 AAAATGACAT TCCCACATCA AATGATGCGG GTTGTGTAA TTGAACAAGT GTACAGAGCA 540
 20 TTTAAGATTA TGCGAGGAGA GCGTATCAT AAGTAAACT AAAAAATTCT GTATGAGGAG 600
 ATAATAATTT GGaGGGTGTT AAATGGkGGA CaTTAAATCC mCGTTCATTC mATATATAAG 660
 ATATATCACG GTAATTGCGC ATATAACTT 689

(2) INFORMATION FOR SEQ ID NO: 684:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 858 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 684:

TTATTAAATT GGTATGTGTT CATTATACAT ATGaCAAATA TGaATGTAAA CCGATAATTT 60
 AGATTTTTTG GAATAACCTG AAAATTCAAG TTaTAGCGTT GCTTATATTT TAAAAGGTGG 120
 40 TGATAATGAG ACTTTTTGAA AAATAAAATT CAAAATACTT ATAGCATAAT CAATATGCAC 180
 ATTAAATAAA TGIACCTTT TAATGCGTTG ATAAGTGTAT TTGTAATTTA GAGAAGGGGT 240
 GTTCACTATG CTGATGTGTT AAAAAATAAA ATAAAAAGGA CACCTCGATG CTATAAATAT 300
 45 TAGCATCGAG ACGCCAGTT AATGTCTATT AAATTGAATA TAGTCTCGGA CATGAATCAA 360
 TGCCCTAGGC CCTGCAATGT TATATTGACA GTAGTTGACT GAATGAAAAT GACTTTGTAG 420
 50 CTAGCTTTTT TCAATCCTG TCGGTGCAAC ACATAGAGAA ATTGGATTCC TAATTTCTAC 480
 AAACAATACA AGTTGCGGAA TAAGTCCCAA TATAGAAGGT GACAGTAAGC CAACTTACAA 540
 TAATGTGCAA GTTGGTCGGG CCTCAATACA GAGATTTTCG AAAAGAAATT CTACATATTa 600

	GCCACCTTGT TTATTTAAAT CGATAACACG GTTTGCATT GTATTGATAA ATTCAAAGTC	720
	ATATGAAGTA AAGATAATAG AACCTTTGAA TGATTTAAGT CCATCATTAA CAGCAGTAAT	780
5	ACTTTCTAAG TCTAAGGGTT GTGGGTCATC AAGTAAAAGA CGTTGCCCTG ATAACATCAT	840
	TTACTAGCAn CAGGACTT	858

(2) INFORMATION FOR SEQ ID NO: 685:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1747 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 685:

20	TTAGTATTTT CAGGnTGGAA ATTGATGTTT GAAATTCAC T GAAATGGGCC AGAACCTgAA	60
	ATGaAACTTT ACCAACAATT TGGtCTTCAT CAATGAGGCC AAACGCACGG CTATCTTTAC	120
	TTACTTCACG ATTATCTCCA AGCACTAAAT ATTTACCTTT TGAATGACA TTTGATTTAG	180
25	GATTGCGATT CGGTAAATCT TTAACCTGGA AAGTCCAGT AATGTAATCA CCTTGTTTAT	240
	GTTTTAAATT GTAGTTTAAA TATGGTTCAT CTGTGTTTTT ACCATTGACA TATAATGTAT	300
	CATTTTGTGA TTCTACTTTA TCACCAGGAA CACCGATGAC ACGTTTAACA TAGTCATCAT	360
30	TTTTGTTTGC ATGGAAGACA ACTACATTAC CTTTTTCCAA ACCACCTGTT TTATATCCAA	420
	CAATGTTTAC AGCTACTCGC TCGCCATCTT TCAAAGTTGG ATCCATTGAT TCACCTTTAA	480
35	TTGTATATGG CGTAACAATA AATTTACCTA CTATAAATAA AATGACAAAA GCGACTGCAA	540
	TTGAAATAAT CCATTCCAAT ATTTCTTTTT TCAATTTTGA CACCTCTTTT TAAGATTTGA	600
	ACTGAACAGT CCATTTTGAA AAAGGATAGT ATCGTAAAcT AACATTACCA ATAATAcCCT	660
40	TTTTATCGAT TAAACCAAAT TGTCTTGAAT CGTGCTTGtK ATTATCTTGA TCATTTAGCA	720
	CAACAAAATT GTTTGGCGGA ATAATATCAC CATCTAATTC TTTAAAATTG CGCAAACATA	780
	AATCTTTAAT TTTTCTGTTT TTGGCATAAG ATGCGTCAAC CGGTCGGTCA TCACGGTATA	840
45	ATTGTCCCTG ACGAAACGCC ATTGATTGAC CAGGTTTGGC AATAATTGCA CTAGTATATA	900
	TCTCGTTACC ACGCCTATAT GTAATGATAT CACCATTATT CAATTGATTA AATGTAACCT	960
50	TAATTTTATT TACAATAACA CGATCCCCCTT TGTAAAGGGT TGGTGACATA TCATTATTCG	1020
	GAATGACATG ACCAACTATT ACAAAAGTTT GTACGAACAG TACAATGATA ATAGCAAGTA	1080
	TCAATGAAAT CAAATATTTT ACAACTTTTT TCACGATGTC ACTCCTTTTT CGATCCATA	1140

ATCCCTCTTA AAGGATGCGT TAAAATTGTA GTAATTTCTT TACCTAAATA ACCTAAAATA 1260
 ATTGTTGAAA CTAACCTTGA TGATGCCAAA ACAATGAAAT AATATTTAGG TCTAATATGA 1320
 5 GATAGACTCG CTACAAAATT TATTAATGTA TTTGGCGTAA AAGGAAAACA AAGTAAAATA 1380
 AACAATGGGA TTAATCCTTG GCGATCAATA AAATAATCA AGCGTTGAAC AGCAGTACGT 1440
 TGTTTAATTC GCTGCATCCT CTCAGTGTTT ACCAATCGTT TACAGATCAA ATAGACTGTA 1500
 10 AATGTTCCAG AAATTAATCC AAGCCAATA ATCAATATAC CTAAAATAGG TCCATAAGCT 1560
 TGAATGTAA TTAATAATA GAGTGCTAAA GGAAATACTG GAATTATAGC TCTAATATAT 1620
 AACAATATA ATCCAGGTAA ATAACCAAAC TGTCGAAATA TCTCAAACCA TTCTTCTACT 1680
 15 TGATGAAACG ACAAATCATC AATCCCTTTC TTGGTTGAA GATAATTATT CTTACATTAT 1740
 AAAGTTA 1747
 20 (2) INFORMATION FOR SEQ ID NO: 686:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 645 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 25 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 686:

30 CGTAAAGATT ACTATTTAGG AGGGTGACTA TGAAAAAGAA ATTAGGTATG TTAATTCTTG 60
 TACCAGCCGT AACTTTATCA TTAGCCGCAT GTGGGAATGA TGATGGAAAA GATAaAGATG 120
 35 GCAAGGTAAC AATTWAAcGa CaGTTaTCCm TTGCAATcAT TTgCAGAGCA AATTGGTGGa 180
 AAACACGTGA AGGTATCATC AATCTATCCA GCAGGGACAG ATTTACATAG CTATGAACCA 240
 ACACAAAAAG ATATATTAAG TGCAAGCAAG TCAGACTTGT TTATGTATAC AGGGGATAAT 300
 40 TTAGATCCGG TTGCTAAGAA AGTTGCATCT ACTATCAAAG ATAAAGATAA AAAACTGTCT 360
 TTAGAGGATA AATTAGATAA AGCAAAGCTT TTAAGTATC AACACGAGCA TGGTGAAGAG 420
 CATGAACATG AGGGACATGA TCATGAGAAA GAAGAATATC ATCATCATCA TGGTGGATAT 480
 45 GATCCACACG TATGGTTAGA TCCTAAAATT AACCAAATCT TCGCTAAAGA AATTAAAGAT 540
 GAATTAGTGA AAAAAGATCC AaAACATAAA GATGACTATG AGAaAAACTA CnaAAATTAA 600
 50 ACGACGATCT TAAGAAAATT GATAACGATA TGAAGCAAGT TACAA 645

(2) INFORMATION FOR SEQ ID NO: 687:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 956 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 687:

5	TTTGTTACTG	CTTCTAAAT	AATATCCTTT	AATTGTTTAA	CATGTTGGAT	TGTCATATGA	60
10	GGTGATGGTA	CATTAAAAGG	ATTTAATTCA	TCTATTTGTG	CATATTGATT	TATGACATCT	120
	TGATGCATTG	AAATAGGGTT	GATATCATT	GTTACTACTT	TATTAGATTG	GTCTTGTGAC	180
	ATACTAATGG	TGCCACCACT	ATGAATAACA	AGTAGATGTT	TCATATATTT	CCTCCTATAT	240
15	TTAATTTACC	TAATTATGAT	AAAATATTAT	TCATAAAACG	ACAAGGAAGG	GAAATGACGC	300
	ATGAAAGCCA	TTAATATTGC	ATTAGATGGT	CCAGCTGCTG	CCGGAAAAAG	TACAATTGCG	360
	AAACGTGTAG	CCAGCGAACT	ATCAATGATT	TATGTCGATA	CAGGAGCAAT	GTATCGTGCA	420
20	TTAACATACA	AATATTtAAA	ATTAAACAAA	ACTGAGGACT	TTGCAAAACT	AGTTGACCAA	480
	ACAACATTAG	ATTTAACCTA	TAAAGCAGAT	AAAGGTCAAT	GTGTCATTTT	AGATAACGAA	540
	GATGTAACAG	ACTTTTTAAG	AAATAATGAT	GTGACGCAAC	ATGTTTCATA	CGTTGCATCT	600
25	AAAGAGCCAG	TACGTTTATT	CGCCGTTAAA	AAACAAAAAG	AGTTAGCTGC	AGAAAAAGGT	660
	ATCGTAATGG	ATGGTCGCGA	TATCGGAACT	GTAGTGCTAC	CAGATGCAGA	TTTAAAAGTA	720
30	TATATGATTG	CATCAGTTGA	AGAGCGAGCA	GAAAGAAGAT	ATAAAGATAA	TCAATTAAGA	780
	GGTATCGAAT	CAAATTTTGA	AGATTTAAAA	CGTGATATTG	AAGCTCGTGA	TCAATATGAC	840
	ATGAACCGTG	AAATATCACC	ATTAAGAAAA	GCAGATGATG	CAGTGACATT	AGATACGACm	900
35	GGCmAGTCGA	TTGAAGAAGT	TACTGACGAN	ATTTTAGCGA	TGGTGAGTnC	AATTnA	956

(2) INFORMATION FOR SEQ ID NO: 688:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1166 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 688:

45	AAAAGGGAGG	AAAGAGAACA	GTTAAATATG	AATACAAAAT	AATTTTGTTT	TCGGACAGCA	60
50	GGGGTATTAG	ACGCGATTGA	CAATGTCTGT	TTAATTAAAC	GTAATGTTTA	TTTAAGCGAT	120
	GAATATTAGG	TGAAAAGTTT	TTGAATTIGA	ATGTAATTGA	GGTTTATTGA	TTAGACATTT	180
55	TATTGAATTG	CGTGTTATTA	TATAAATGTA	AAAATAAGAC	GACATGCGCG	AACATGTCGT	240

5 TAATGCGGAA TGGTTTTTTT ATTTTCCGCT AATTGAAATA AAAATGACGT TTTAATATAT 360
 TATGGGCTAG GTGGTTTGTA AGAAAGGGTT AGTTATTAAT GTTTTATGAA TTAAGGAAAT 420
 TTGAGTTTAA GGTTTAATCA ATTGTGATTT TGTGATGAA GCGTTTAGTT AGAGTATTTT 480
 CGCCACCACT AGTTACTCCT TCTCCCACTT TACCCGAGAC TGGAGAAGAG CTATCTGAAG 540
 10 AATAAATAGA TACTTTTTTG CCATTTTGTA GTAAACCAAG ACCTTTTAAC TtCTCGGTTA 600
 GAGAATTCCA TGTATTTTGA GCATCTAGCT TTTTGTAAA GTCAyCGTAG ACATTTTCCT 660
 TAGTTAAATC AATTTGTTTT AATCCTTTAA AGTCTATAGA TTGTGTTAGA TGGCCTCCAT 720
 15 CATCATTTCC AGGAGCAGAA ACGCTGCTAG AATATCCATT GCTTAATAAA TAAGTAACGT 780
 TGATTGTTTC GTACTCGTTA CTTAAATAA TATCAGAATC ATGTAAGaAT CTTTAACTTT 840
 TTTCCATAAT TGACCATCTG TCATTTTTTC TTCTGCTTTA GCCGTTTTAA CAACTTTATT 900
 20 TGTATCTAAT CCTAAGTATG AAGAATGTAA GCCTGTTCTT AATGTTGTTA ATACTAAAGC 960

ACTTGCTACT aATGTTTTAC CTAAAAAtT TGTATTCATT TTTATTGCTC CTTtTTTTAT 1020
 ATTGTAAACG TTTACAATGA AAATATAATA ATAATTTTTT AAAAGAACAA TTAAGTAAAT 1080
 25 ATCAAAAATG TATTAACAT CTATTAAC TAATAAGAA TAATTTTTTA ACATAGTTTT 1140
 GTTGTTTTGA ATTATAAAAA CTAAAG 1166

(2) INFORMATION FOR SEQ ID NO: 689:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 1083 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 689:

40 AGCACTGAAG GATGGCTAGT TGTCATAGCA TATGCGGTCA TTGGTATAGT TATAACGAGC 60
 GTTCTTTATA TGTTGTCTAT TAAAATTTTT AACAAACAAG AACTAKAATT GTCGATTTTG 120
 GTGATGATAG TATTTGAAAT AATATTTAGA GCAGGTGATA AATCTTTACG ATTGTCATCT 180
 45 GTTCTTTTtK GTGTGGAATG AAATGTGGGG GATAAGTATA GGTGACATAT CTATATTGAT 240
 TTATTTGTTT TGAGGTGGTT ATGTTGTGTG GGAATTATTT CTTTTTAGAT AGCGGGGATT 300
 AGAGGATATA TGTTATTTAT AAGTATCATT TGATGATTGT ATAGGCTAAC GATTTCTCTG 360
 50 GAAATATTTA AAAACCTCGA TCATGTAGCA TAACTGAAGT TTGTCACAAA AGTATAATGT 420
 GAAGTTCGAC ACTTTTGGaT TCAGTTCAAA TACTTTGACC GAGGTAAATA CTATTTATTC 480

TGATACTGAG ATAATCATTa CATGGTCGTG ACCTTTAAAT AAAAGGCTGA CAATATAAGA 600
 CATAACGAGT ATACCTAGTG AATATGAAAT ATACTTCGCG TTTGTCAGTT CATTATGGAA 660
 5 ATAAGGCGTG ATTAACCATA ATCCAATATA GAATATTAAA AACTGATAT ACATCATATT 720
 AATTTCAAAC AAGTCATTa GTTTATTGTT ATTACTAAAA ACAATTGCAG CATTAAATCAC 780
 ACCTAAAGCG ATATTGATTA ATAGATGCGT ATACGATAAA CGGAAACCGA TAGATGTTAA 840
 10 TTTATGATTA ATATAATTTT CAGTAATGAT CCAATATACA CCGAAAAGAC TAATTAAAAT 900
 CATAAATTGG AATATATAAA TGTAATAAA ATGATCAATG CTAAATGATG ACGAAGCTAA 960
 15 ACCAACCAGT ACCTCGCCa AGWTATaATT GTTAGTAACG AAAAACGTCT ACTAAATGCA 1020
 TCATATTAAC AGGTnTAATA CAAGTATTTT TGAAATGGAA TAAGnCTGTC GCTGCATGAT 1080
 ACG 1083

(2) INFORMATION FOR SEQ ID NO: 690:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 627 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 690:

TTAATCATCT GGATGTATTT AGTATTnAGA ATAATAAnAA AACGATCATG TTGTATTtGA 60
 GTAGCGATTG GTTTGCGGAA TTAGGCTTTA CTTTCTTTAA TTACCACTAT ACAGCAAAGT 120
 35 TGATTAAATC ATCCTATAAT TTGAAATGTC TACTATTAAA ATTGACATAT CGATACCTTG 180
 ATAATCAGCC TCTTAATGAC GCTGATAYTA GAAAATTACA GGATATTATT AAAATCATTG 240
 CAAAAGAAGC AAGTATGGAT AAAAAGATTG CACAAAATCA ATATCGATAT GCGTATTATG 300
 40 GTGATTTGCG TGATGAGCTC GAATATATTT ATCAAAATGT AAATCAACGA TTGACATTAA 360
 AAAGTGTCGC TGATAAATTA TTTGTCTCAA AGTCAAATTT GTCATCACAA TTCCACTTAC 420
 TTATGGGCAT GGGTTTTAAA AAATATATTG ATACTTTGAA AATnGGTAAA TCGATTGAAA 480
 45 TTCTACTTAC TACTGATAGT ACTATTAGCA ACATAAGTGA nCATTTAGGT TTTAGTAGTA 540
 GCTCCACTTA CTCTAAAATG TTTAAAAGTT ATATGGATAT CACACCGAAT GAATATCGTA 600
 50 ATTTATCAAA ATATAATAAn TGTTTAC 627

(2) INFORMATION FOR SEQ ID NO: 691:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 641 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 691:

5	TTGAACGTAA TGCTAGCAAA TGACTTTGTG CCATAAAATA TTCTTCCCAT TTGATTCTTT	60
10	CCAAGATGTT CACCTTCCAT ACTTAAAATT TAGTAACATT TTCTAATAAT ATAAGATTAA	120
	TCACAAAAAA TAAATTTGTC AATTAAAATA ATCCATTATG TCGTGAAATA AGATTTCAGT	180
	TTATCAAAAG TTTTACTTCC AAAACCTTTT ACTTTTTTCA AATCGTCAAT TTCTTGAAAT	240
15	GCACCTTGTT GGTGCGATA TTCAACAATT GCATTAGCTT TAGCTTGCCC AACTCCAGGA	300
	ACAGACATCA ATTCTGATAC AGATGCCGTA TTAAATTTA CTTTAGTATT ATTTGTGTTT	360
	CCaTTTTTTT CGTGACACT GTTTACTTCA ATTTGTGGTT CAACATTCTT TTGTCCTTTA	420
20	TGAGGTATGA AAATCATTTT TTGATCTGTT AATTTTTTCAG ACAAATTAAT TTGACTTACA	480
	TCTGCATCCT CCAATAATTG TGCTTTATCA AGTAAATCAA CTACTCTATC CTTAGATGTC	540
	ATTTTATAAA CATTAGGATG TTTAACAGCA CCTTTTACAT CGACATATAC AGGACCCTTA	600
25	TTTTTGGAAT TATCTCCATC TTTGACCTGG ACATCTTCTA C	641

(2) INFORMATION FOR SEQ ID NO: 692:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 631 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 692:

35	TATTAAAGnA CTTGATGAAC CAAATCATAA AAAGCnATAT ATGTTATTTG CAGCTGGCAT	60
40	TGTGTTnGCA ACTATTTTAC TTATTTTCGGC ACATTTATAC AGCAGAAAGA GAGGTAACCA	120
	AGTTTGAGAA TCATAAGTA TTTAACCATT TTAGTGATAA GCGTCGTTAT CTTAACCAGC	180
	TGTCAATCTT CCAGTTCTCA AGAATCAACT AAATCCGGCG AATTCAGAAT CGTACCAACA	240
45	ACTGTTGCAT TGACAATGAC ATTGGACAAA TTGGATTTAC CAATTGTCGG CAAACCCACG	300
	TCATATAAGA CATTGCCTAA TCGTTATAAA GATGTACCGG AAATTGGTCA ACCAATGGAG	360
50	CCGAATGTTG AAGCTGTAA AAAGTTAAAA CCAACACATG TTTTGAGTGT GTCAACGATT	420
	AAAGATGAAA TGCAACCATT TTACAAACAA TTAAATATGA AAGGCTACTT TTATGATTTT	480
55	GATAGTTTAA AAGGGATGCA AAAGTCGATT ACACAATTAG GTGaTCAATT TAATCGTAAA	540

GCAGCTAAAC AAAAGAAACA TCCCAAAGTA T

631

(2) INFORMATION FOR SEQ ID NO: 693:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1111 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 693:

15	AATTAACTA TGTTTTCCAC ATTGTTTCAT GTCACGAAAA GGACAACGCG CGACTATAAG	60
	TATCAACTAT TTCCACAAGT TTTATTGGTG TTTTATTAT TCATCGATAC GCTTCATTTT	120
	CATCTCTCCA ACACAAAAAA GAAGCTAAGC AACTTATGTT GCCTAACTCC TCTATACTAT	180
20	CCATATTTTA CTATTATCCA TATTTTCATTG AATTATCTAA TGTGGGCTTC TATTTTTTCA	240
	ATATTTCTAC CGTCAATGAC GTCACATGCG CGATTGTGTT GTAATTTTTT ATTAAGTTCA	300
	AACGTATAAT AGCCGCCATC TTTCATTATC ACTTTTATCT TACTATCTTT AGGAACTTTT	360
25	TTATACAGAT CAAAATTTTG AATTAAATAC TGTCTCAATT TAAAGTCGAG TTCTTTAAGT	420
	GAAATCTCTT CTTTATAAAT GTAGTGTACT CTACCGTACG TAGCAATACC GTCACCTTCA	480
	TCTCTCTTGA TTTGAAATCT TGGTGCCTTT ATATAATCAT AATAAGCGTC TTGATTTTTT	540
30	TTAGTGACAC CACCATATGA AAACACTGTG CCATTACGGT TTTCCGCTTC TTTAACAACA	600
	AATATGTCTA ATCCCGGATT TTTACGTGCT TTAATCTTT CAATATCTTT ACCAAATATC	660
35	TGTACTCTTG TGAATTTTCT ATTTTTATCA AAGATAAGGT AATGCTTGCC ACCTTTGCTA	720
	TAACGATAAC CAGTAACATT TTTAAGTTCC TTACTTGCGC CACTATAGTA ATCTCTTAAG	780
	TCAAAGATAT CTTTGTGCAC ATTTTCATAT TTTGCTTTAT GTTCACTCGC ATTTACAGTT	840
40	TGATGCAATG ACGTTATTGT TCCTGTTGCT AAAATACCTA ATGCTAAACT TGCTTTGCGA	900
	ATTGCTGTCA TTTTCATAGT TGTATGCTCC ATTCGTAATT ATTAGATTG TTCGCTTACG	960
	TCTATTGAAT CATAAGCTT TATTATAGTT AGCGTATTTG ACCTTTCACA TTAAACCATG	1020
45	TTAATAATC ATTGAATCAT TATTAAGTAA ATTAAGGATC TATAATGTTT GTTAAATAAA	1080
	CTGAACCCGT TGTGCTTCAC ACCCGnTnGA T	1111

(2) INFORMATION FOR SEQ ID NO: 694:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 694:

5 TTATGGATGG ATTAAGAGGT CGTGTGAAA AAATCAACGA TAACTCTGTT ATTGTTGACT 60
 TAACAATTAT GGAAAATTTT AATGACCTTG ATTTACCGGA AAAAAGTGT ATCAATCATA 120
 AACGATATAA GATTGTTGAA TAAGAAGGTA AGTTATAATG AATAAAATCT CGAAGGCTTT 180
 10 AACTTGGTTT ATTATAAGTT TCATTATATT TCATCTCATA TTATTTATTA TGTGGGGCGA 240
 ACACCAAGAA TACTGGTATT TATATACAGG TATAATGCTA ATTGCTGGTA TCAGTTATGT 300
 15 ATTTTATCAA AGAGATATTG AATCTAAGCG GTTGCTTACA TCAATTGGTG TTGGTATTAT 360
 TACGGCAATT ATTTTAATTA TGCTCAACT TTTATKCTCA CTTATAACTT CTAATTTAAG 420
 TTATAG 426

20 (2) INFORMATION FOR SEQ ID NO: 695:

(i) SEQUENCE CHARACTERISTICS:

25 (A) LENGTH: 737 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 695:

30 AAAAGGGGnG TAAGGTTTAG CTCAAGTACG AGAAGTCTTT GGTGATGAAG CAATTGATGA 60
 AAATGGTGAG ATGAATCGTC GTTATATGGG TGATCTAGTG TTTAATCATC CAGAAAAACG 120
 35 CTTAGAATTA AATGCTATCA TACATCCTAT CGTGCGAGAT ATTATGGAAG AAGAAAAGCA 180
 AGAATATTTA AAACAAGGAT ATAATGTAAT CATGGATATT CCATTATTAT TTGAAAATGA 240
 ATTGGAAAAT GCAGTAGACG AaGTGTGGGT TGTATACACT TCTGAAAGTA TACAAATGGA 300
 40 TCGTTTAATG CAACGTAATA ATTTGTCATT AGAAGATGCG AAAGCACGTG TCTATAGCCA 360
 AATTTCTATT GATAAAAAAA GCCGAATGGC CGATCATGTT ATCGATAATT TAGGGGATAA 420
 ACTTGAATTA AAACAAAACC TTGAGAGATT GTTAGAAGAA GAAGGTTATA TTGAAAaGCC 480
 45 GAATTACGGA GAAGAAGATT AATATTACAC TATAAATAAG TCATTACTTT ACGTACGCGT 540
 TGATGTATGT AAGTAATGAC TATTTTTTAT AAAAAAGATA AATAAATCAA CGGAAAACGC 600
 50 TTTCAAATTT CATATAATAT GCTATACTAA TTCCATAAAG TATAACACAT AAAGATCAAG 660
 GGGTGCTTTT AATGTCAACG AATATTGCAA TTAATGGTAT GGGTAGAATT GGAAGAATGG 720
 TATTACGTAT TGCATTA 737

55

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 432 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 696:

AACGATAAGA ACAAAGATA TATTACAAAG CGTTTATTTA AAACGTTATT TATTACGCGC 60
 GATGATGGCA GGATTATTA TCGGGATTAT TACGGTCTTC GTATTATCAG TTAAAGCAAC 120
 ACACGAACCA GATTTACCGC CAGgCATTGT GAATATGGCC AGTGCCATTA CATTGAGCTT 180
 TCGGTTAGTA CTCATTTTAT TTACAACTC CGAACTACTA ACCAGTAACT TCATGTACTT 240
 TACTGTAGGC CTGTATTmTA AAGTAATTAA ACCAACTAGA GTATTGaAAA TATTTTTTATT 300
 ATGCTTTGCA GGAAATATTT TAGGTGCTGC TATTTyATTT AGTTTCATGC GTTTTTCAAA 360
 TGTAATGACG CCAGATAwgt TAAAyCAGTT ATCAGCAGTT ATAGAGCATA AAACGTTGTC 420
 TACTGGTTTT GT 432

(2) INFORMATION FOR SEQ ID NO: 697:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 782 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 697:

CTTTTATACG AAAGTTAAaA TCAAATATAA CATTAAATGTT TGATGGGGAT TTTGCGGGTA 60
 GTGAmGCAAC ACTTAAAACA GGTCAAAATT TGTTACAGCA AGGGCTAAAT GTATTTGTTA 120
 TACAATTGCC ATCAGGCATG GATCCGGATG AATACATTGG TAAGTATGGC AACGATGCAT 180
 TTACTGCTTT TGTAaaaaAT GACAAAAAGT CATTTGCACA TTATAAAGTG AGTATATTAA 240
 AAGATGAAAT TGCACATAAT GACCTTTCAT ATGAACGTTA TTTGAAAGAA CTAAGTCATG 300
 ATATTTGCTT TATGAAATCA TCGATTTTGC AACAAAAGGC TTTAAATGAT GTTGCAACCAT 360
 TTTTCAATGT TAGTCCTGAG CAATTAGCTA ACGAAATACA ATTCAATCAA GCACCAGCCA 420
 ATTATTATCC AGAAGATGAG TATGGCGGTT ACATTGAACC TGAGCCAATT GGTATGGCAC 480
 AATTTGACAA TTTGAGCCGT CAAGAAAAAG CGGACnAGCA TTTTAAAAAC ATTTAATGAG 540
 AGATAAAGAT ACATTTTTTA ATTATTATGA AAGTGTTGAT AAGGATAACT TCACAAATCA 600

TATCAGTGAT GCTGTGCAGT ATGTTAATTC AAATGAGTTG AGAGAAACAC TAATTAGCTT 720
 AGAACAATAT AATTTGAATG ACGAACCATA TGAAAATGAA ATTGATGATT ATGTCAATGT 780
 5 TA 782

(2) INFORMATION FOR SEQ ID NO: 698:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 714 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 698:

AAATCATTGG CAAAATATAC GAATTGCATT TAAATCGTCA ATTTACATAT ATTTTTCGGT 60
 20 AGTAATCAAT CGTTATCATT GTTATTTATC GTTACATTAT TTCGAGTATC AGTATGTATT 120
 TCGGGCTTCG TTTGATAACG ACATTTCTTT GTGACATCGC TTCATCAGTG TAACAACAAA 180
 TACAATGATT TCGTGATGTT AGTTACCCAT TTTATGTGTT GCATAAAATA TGTTGTTATA 240
 25 AAACATTTTA AATCATTTTA TATAACAAT CTATATATTT TTGGCATTTC CAAAATATCA 300
 CTTGTTATAT TAAAAACCGA CAAGACATTT TATCTTATCG GTTGAAATTT GTTATTGTTA 360
 TTTGTAATGT TTTTAGGTTT CTTTTTAATA TAATATATTT CAGTGAAAAT ACATGATTGA 420
 30 TTGTGATTTT ACTGAAACAT GGTTAATTGC GTTGTGTGATG AATAACTTTA GCATAAATAT 480
 AGGAAGTTAT TTTGTACATC GCCATATATA GAAACGAAAT TATAATGACA GCTAGTACGT 540
 AACTTGTTAA AAATATATGA TGTTATTAA TACCTATCAT ATTTAGTAAC GTATATACAA 600
 35 TGTTACTAGA AATTAATGTG TGAATCAGTG CTACTGTTAT TGGTATtGCG AACAAGAAAG 660
 TCATTTGATT TCGTGTTATC TTTGCTATTC TTCCATTATC TAAACCAAGT TTTT 714

(2) INFORMATION FOR SEQ ID NO: 699:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 699:

ACTGAGAGCA ATAATTTAGT AACTTCTACT CAAGGAATTA TTAAAGAAGC ATTGCATAAA 60
 TTGGGATTTG nnTTTAATTA AAGAACCCTT AAGAATGTTA CAAGTGCCTA TCCCTGTACG 120

TGGACCAACA AAAGGGGGCG TGCCTTTCCA CCCAGATGTT GATGAAGAAG AAGTAAAAGC 240
 ATTATCAATG TGGATGACTT TGAAATGTGG CATTGTGAAA CTTACCATAC GGTGGTGGTT 300
 5 AAGGGTGGTG ATCGTTTGTG GATCCACGTC AAAGGAGCAT TCCATGAAGT TGGAACGTTT 360
 A 361

(2) INFORMATION FOR SEQ ID NO: 700:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 943 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 700:

20 GTCCTTAATT GGTATCCACC TTTAGCACCG CGTACACTTC GAATTAACCC CGCATTTCCTT 60
 AAAGGACCTA CAAGCTGTTT TAAATATAAA TCACTCAAAT TATTTTCTTC AGCAATTGAC 120
 TTTAATGATA TACATCCTTG CCCCTCTTTT TTAGCAAGAG AAATCATCAA TGTAAGTCCA 180
 25 TATCTCCCTT TAGTAGAAAT TTTCATTGTA TAACCTCACT TAATTCGAAT ATTGATATTC 240
 CCATTTTAGC ATTTTTTGAG TTAAGATAGT ATAAGAAAGG TGTGACAAAT GTGAGTACAG 300
 AACCATTAGC ATCGAGAATG CGCCCAAAAA ATATAGATGA AATCATTTC CAACAACATT 360
 30 TAGTTGGACC AAGAGGCATT ATCAGAAGAA TGGTTGATAC AAAAAAATTA ACTTCAATGA 420
 TTTTTTATGG TCCACCTGGT ATAGGCAAAA CAAGTATTGC CAAAGCAATT TCGGGCAGTA 480
 CGCAATATAA ATTCAGACAA TTGAATGCTG TAACTAACAC TAAAAAGAT ATGCAACTTG 540
 35 TTGTTGAAGA AGCTAAAATG TCTGGTCAAG TTATCTTGTT ATTAGATGAA ATACATCGAC 600
 TAGATAAAGC TAAACAAGAC TTTTATTAC CTCATTTAGA AAATGGCAAA ATCGTCTTGA 660
 TCGGTGCTAC AACTTCAAAT CCTTATCATG CTATCAATCC AGCGATTCGT TCAAGAGCGC 720
 40 AAATTTYCGA GTTATATCCT TTAAATGACG AaGATGTGCG CCAAGCGTTA ACTCGTGCAA 780
 TAGAAGATGA TGAGAATGGT TTGAAAmCAT ATCaACCCAA AATTGATGAA GATGCCATGA 840
 45 CCTACTTTTC TACACAAAGC CAAGGTGATG TTCGTAGTGC GTTAAATGCA TTGGAATTAG 900
 CTGTATTAAG CGCAGATAAT GACAAAGACG GTTATCGACA TGT 943

(2) INFORMATION FOR SEQ ID NO: 701:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 445 base pairs
 (B) TYPE: nucleic acid
 55 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 701:

5 CATTAAAGTGA AGTTGTTGAT ACACCCATGC ATCAAGTCAA TTGTTCTGTT GATTTAGATA 60
 CAGAAAGCTT ATTAGGCTTT AAAACAATTA AAACAAATGC GGAAGGTCAA CAAGAAATTG 120
 TCTTTGTAGA TGGTCCAGTT ATTAAAGCTA TGAAAGAGGG GCATATTTTA TATATTGATG 180
 10 AAATAAATAT GGCTAAACCT GAAACATTGC CTGTATTAAA TGGGGTCTTA GATTATCGTC 240
 GTCAAATTAC GAATCCATAC ACTGGTGAAG TAATCAAAGC TGTACCAGGA TTAAACGTTA 300
 TAGCAGCGAT AAATGAAGGT TATGTTGGtA CTTTGCCAAT GAATGAAGCA CTAaaaaaAt 360
 15 CGCyTTGTTG TtATTCACGT kGATTATaTT GATGGGGaCA TTAAAAAAT GTGanTAAGG 420
 AGCAAGGTTT ATTACAAGAT GTTAA 445

(2) INFORMATION FOR SEQ ID NO: 702:

20

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 752-base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 702:

30 TGCAAGATAA ACAAATTTGT CATTGTTTTG GTTGTAaaaa AGGTGGCAAT GTTTTTCAAT 60
 TTAactCAAGA AATTAAAGAC ATATCATTtG TTGAAGCGGT TAAAGAATTA GGTGATAGas 120
 TTAATGTTGC TGtagATATT GAGGCAACAC AATCTAACTC AAATGTTCAA ATTGCTTckG 180
 35 AyGATTtACA AATGATTGAA ATGCATGAGT TAATACAAGA ATTTTATTAT TACGCTTTAA 240
 CAAAGACAGT CGAAGGCGAA CAAGCATTAA CGTACTTACA AGAACGTGGT TTTACAGATG 300
 CGCTTATTAA AGAGCGAGGC ATTGGCTTTG CACCCGATAG CTCACATTTT TGTCATGATT 360
 40 TTCTTCAAAA AAAGGGTTAC GATATTGAAT TAGCATATGA AGCCGGATTA TTATCACGTA 420
 ACGAAGAAAA TTTcAGTTAT TACGATAGAT TTCGAAATCG TATTATGTTT CCTTTGAAAA 480
 ATGCGCAAGG AAGAATTGTT GGATATTcAG GTCGAACATA TACCGGTCAA GAACCAAAAT 540
 45 ACTTAAATAG TCCTGAAACA CCTATCTTTC AAAAAAGAAA GTTGTtATAC AACTTAGATA 600
 AAGCGCGTAA ATCAATTAGA AAATTAGATG AAATCGTaTT ACTAGAAGGT TTTATGGATG 660
 TTATAAAATC TGATACTGCT GGCTTGAAAA ACGTTGTTGC AACAATGGGT ACACAGTTGT 720
 50 CAGATGAACA TATTACTTTT ATACGAAAGT TA 752

55

- (1) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 830 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 703:

10	nCGTTTTTGT nAAACnGCTT ATATGTATAA CTTTTCCCAA TTTATCATAA GTTTTGATAG	60
	AAGGAGTTGG ATCGCTAAAG AAAATATCTC TAAAGATATC ATCTCAATG ATAGGAATAT	120
15	TATGTCTTC GCTATAAGTA ATTATATTTT TCTTTGCTC ATTCGTTAAA GAACGACCTG	180
	TCGGGTATT AAACCTAGGT TCTATATAAA TCGCTTTATT TTTAAAATTA ATAAATCTAT	240
	CAATGATGGT ATCAATTTCA TTAATTTGAT TATAAGGAAC ATCAATATGT CTAAAATTCA	300
20	ATTGCTCAA AACATTTGTA GAGTGAATAT ATGATGGTGT ATTCGAAATT ATTATGGCAT	360
	CTTGACCTAA AAACCCAATA GATAAAAGTT GAATGGCATG TAAAGCGCCT GAAGTGATCA	420
	TTACATTTTC TCTACCTACA TTTATACCTT GCTTTGACAT TCGTTCAACG ATAATATCTC	480
25	TTAACTTGAT ATAACCATAG CCATTATTAT AACCAAAGA TAAGCTTCA ATATGACTGG	540
	CTGTATTAGA CATGGCTTTT TTCAATTGAA TATGTGGCAT TAACGATATA CCCAATTCAC	600
	CTTTACTTAT ATGTATATAC GAATCATCTG TCTCAATTTT ATTAATTAAT TGCACCGTAT	660
30	ACTGACTTCT TTGTTGAGAG GACCATAACA TCATTTGAGA CCACTTATTT GTAATATGTG	720
	CTTCATTCAA ATAGTCATTA ACATATGKTC CACTACCTAC TTTAGTATAG ATAAATCCTT	780
	CAGCTTCTAA TAACTCAATA CTTTTAATAA TCGTTACTCT ATTTACGTTG	830

(2) INFORMATION FOR SEQ ID NO: 704:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 659 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 704:

45	AGTGGTGTG GAAAAGCTAT TATGAAATTA TTACGTGAAC AACAAGTTTA ATAAAAAAG	60
	AGGGGTCAA TATGAAAGGA TTAATTATTA TTGGCAGTGC ACAAGTGAAT TCACATACAA	120
50	GTGCACTAGC AAGATACTTA ACTGAGCATT TTA AACACA TGATATTGAA GCGGAAATAT	180
	TCGATTTAGC AGAAAAACCG TTAAATCAAT TAGATTTTTC AGGAACAACA CCGTCTATTG	240

TATTAGGAAC GCCAACTAT CATGGTTCAT ATTCTGGAAT ATTGAAAAAT GCATTAGATC 360
 ATCTAAATAT GGATTATTTT AAAATGAAAC CTGTAGGCTT AATAGGAAAT AGTGGTGGTA 420
 5 TTGTTAGTTC AGAGCCATTG TCACATTTAA GAGTAATCGT CAGAAGTTTA CTAGGCATTG 480
 CTGTACCAAC TCAAATAGCA ACACATGATT CTGATTTTGC TAAAAATGAA GATGGTTCAT 540
 ATTACTTAAA TGATAGTGAA TTCCAATTAC GAGCAAGATT ATTTGTCGAT CAAATTGTAT 600
 10 CTTTTGTGAA TAATAGTCCA TATGAACATT TAAAATAATA TTAAnAAATA TGTAAATnT 659

(2) INFORMATION FOR SEQ ID NO: 705:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 705:

ncaccatata GTAACGGCA CCAACTACAT TACCGTCTTT TAAAAAGATT TTTTATAGT 60
 25 TATTATCAAC ACTATTAAAT ATTTCAATAC CTTTAATTTT TGCATTTTCT ACAATTTGAC 120
 CAGCACTATA CAAGTCACAC CCAGAACTT TTAATGACGT AAATGTTGTT GATCCCTTGT 180
 ATCCGTTTCGT TTCTTTATTT GTTAAATGAT CAGCTAATAC TTTACCTTGT TCATATAGTG 240
 30 GTGCAACGAG TCCATAAACT TTGCCGTTAT GTCTGCACAT TCACCAACTG CATATACATT 300
 GCTATCACTT GTTTGCATCA CATCATTGAC AACAAATACCA CGATTACATC TAGACCTGAT 360
 CTTGGCACTC CTGGGAAGGC GGAACCACTG CATACAACTA 400

(2) INFORMATION FOR SEQ ID NO: 706:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 706:

TTAAAAATAC AGCTACAGGT AATTTTAATG ATTTTTCATC AATATCAAAT TTGGGATTAT 60
 GGTGTGGCGC TGTAATACCT TTAACCAGTC AGAAAGAATG CACCTGGTCG TACTTTCAAA 120
 50 TAATGTGAAA AATCTTCTCC AATCATCATT AAATCTGATT CATTAAAGCG TACATGTAAG 180
 TCATTTGTG CTTCTTTAAT AACTTGGATA TGCTTTCTCG TTTATTATGG ACAGGCAAAT 240

GCTTAATCCA TTTTGTCCAT ACATGATTCT GTATATCTGA AATCGAAAAGT TCTnACTGTA 360
 CCTTTACAAA ATGCCTTGnn 380

(2) INFORMATION FOR SEQ ID NO: 707:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 707:

CAnAAAGGAT CAAAGTGATC GGTATAGTGA TAATTAGCTC CAAAGAAAGA ATATTCTAAA 60
 TCAAATCCAT ACCAAGCAGA AAGTATTAGC GAATATCAAT TTAAATGGTA CCGATTCAAA 120
 TAAAGAAACA CGACATATAG AATTTTTACT TGATGATTTT AGTGAATCAT ATGAACCAGG 180
 AGATTGTATA GTAGCATTAC CGCAAAACGA CCCTGAATTG GTTGAAAAAC TAATATCCAT 240
 GTTAGGTTGG GATCCGCAAT CTCCGGTGCC AATTAATGAT CATGGTGATA CAGTTCCTAT 300
 TGTGAAGCA CTAACATCAC ATTTTGAATT TACTAAATTA ACATTGCCAT TATTGAAAAA 360
 TGCAGATATC TATTTTGACA ATGAAGAATT ATCTGAnCGT 400

(2) INFORMATION FOR SEQ ID NO: 708:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 447 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 708:

TAATGCTGGT ACGGGTCATG CAGCATTATG TGAGTTGAAC TACACAGTTT TACAACCTGA 60
 TGGTTCTATC GACATCGAAA AAGCGAAAGT GATTAACGAA GAGTTTGAGA TTTCAAACA 120
 ATTCTGGGGT CACTTAGTGA AAAGCGGTAG CATCGAGAAC CCAAGAGAAT TTATCAATCC 180
 ATTACCACAC ATCAGTTATG TTAGAGGTAA AAACAATGTT AAATTCTTAA AAGATCGTTA 240
 CGAAGCGATG AAAGCTTTCC CTATGTTCGA TAATATCGAA TATACTGAAG ACATCGAAGT 300
 AATGAAAAAA TGGATTCCAT TGATGATGAA AGGCCGTGAA GATAACCCTG GTATCATGGC 360
 GGCAAGTAAA ATTGACGArG GTmCAGATGt AAmCTyCGGT GAATTAACAC GTAAAATGGC 420
 TAAAAGCATT GAAGCACATC CAAATGC 447

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1448 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 709:

10	GTGCTACCT GTTTTGTG TTCAATGTT AACTTTCTT TTTGAATAGT AGTATTTCGAT	60
	AATTCTTTAT CGCTTATAAA ATCATCTAGT GGATGGCTTT CTTTGAAACT TTTATTTTCA	120
15	GTCATCAATC ATCTCTCCAA TAGTTGCTAT TTTACATCAA TCTTGATGAT GTTTTTGATG	180
	TAACTTATTT AATTCCATTT CAATATCTAA ACGTTCATAA TCATCTTCGT TGAGACGCTT	240
	TAAATCAGCG ATTAATGTTT GTTTGACCTC ATCCAAAGTA ATTCTGTGTT GTTCTAAGTT	300
20	TTGCTGTTCA TTAATTGATT TTTTGGGCAT TTTTGCTAGA CGTGTATATG CATCAACCAA	360
	ATTTAAAGCA TTATCAATAT GAGAATAAAA AAAGCCTTCA ACTTTATAAA ATGATGCAGG	420
	TCTCTGTCTA ACTGTCGTAT AAATAGAACG TGAAATTG TATATATCAT TAATCTGCCT	480
25	AAAATCTTTA ATTGATCTTA TATTGACATA CGTTTTTAAA ATACCTCTAA GTTTTTGGTG	540
	TGTATGATTT AACTGATTTT GAATATAGCG ATAGTCTTTT CTAGTCAAAC CAATTTCTGT	600
	TAAATATTTG CGTGAAGTGA GTTTTTGTAT CGGTAGGTAT GTCATTAAAA AGCCAACAAT	660
30	ACCAATAGAC ATATCAATTA AAAAGATAC ATCAAGTGCA ATCATCCCAA ATATGCTTGT	720
	TAAAAACGCT ACAGGAATTC CCACTAACAC CCCAAATATA TGAGAAATAT TATATCTCAC	780
35	TGTCATCTTC CTTTATTTAG CATTTTATAT TGATCGAAAA TCCGATAATT TTTGATTTAG	840
	TTCTAACTCT TCAAGTTGAT GGCTTGTTAC ATTTGATGCT GGTGAGGCAC CTTCAATTAC	900
	ACCTTGAATA AATCTCTCTA TATCTGCGTC ATCCCCTTGT GCATATATCT CTACATAGTC	960
40	ATCTACATTT TGAACAGTAC CGACAATGTT ATAGTTCATT GCAATGCGTT GTGTAAAATA	1020
	TCTAAATCCG ACGCCTTGAA CGCGTCCGAA TACTTGTAAT TGTATATGTC TCAATTTTAC	1080
	CACCTCATAA TGTTATTATA CGTAGTTTAA CTTAAAAAAA CTAATAATTA CTATAGTTAC	1140
45	TACTTTGTTT GTTTCAGTTC GTCAAACCTG ATTTTCAGAG GATAAAGGTA TAAAAATAAG	1200
	TATAGAGTTT TTGAAGTATG GAAGGGGTCT TTAATAATGT GGACAGTTAC CAAAATTAGA	1260
	GCCGATTATG AGGGATGGTG GTTATTCACT GACTGGCCAG AAAACATTGT TGAAAAATAT	1320
50	CAATATCAAG ATTTTGATGA CATGTTTAAAG CACTATCAAC AATTGATTAA TCAATGTAAA	1380
	GTTCAAGTTCG ATAAGTATGT CACAGGCAAA TATAATATTT ATGCATTTTA TAATAATTGT	1440

(2) INFORMATION FOR SEQ ID NO: 710:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 519 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 710:

GCTGnAAAAT ATGTTAGAAG CAGATGCATG GGCAAAGCTG GGGTCCTTAT TTATTGTCAG	60
GTAAAGATGT CTTCAATTCA ACTATTGGAA TATATGGTAT GGGAGATATT GGTAAAGCTT	120
TTGCAAGAAG GTTGCAAGGG TTTAATACTA ATATTCTTTA TCATAATCGA TCAAGACATA	180
AAGATGCAGA GGCGGACTTT AATGCAACAT ATGTTTCTTT TGAAACGTTG TTAGCAGAAA	240
GTGATTTTAT CATCTGTACA GCGCCACTTA CAAAAGAAAC ACATCATAAA TTTAATGCTG	300
AAGCATTTGA ACAAATGAAA AATGATGCAA TTTTATTAA TATCGGTAGA GGACAAATTG	360
TAGATGAAAC AGCATTAAATC GATGCACTAG ACAATAAAGA AATTTTAGCA TGTGGTTTAG	420
ATGTATTAGC AAATGaACCG ATTGATCaTA CACATCCATT aATGGGaCGT GaTAATGtTC	480
TGaTTaCACC aCACATTGGG TAGGCGCATT CAGTTAACh	519

(2) INFORMATION FOR SEQ ID NO: 711:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1349 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 711:

CTATTACAGG TGGCGAACCA ATGTTTTCTA AAAAGTCTAT TAGAAATGTT GTTAAACCTC	60
TATTAAAGTA TGCACATCAT CGAGGTATAT ATACACAAAT GAATTCAAAC CTAACATTGC	120
CTCAAGATCG TTATTTAGAT ATTGCTGAAT ATATCGATGT TATGCATATC TCACACAACT	180
GGGGAACAAC TGATGAATTC GCAAATGTTG GCTTTGGCGC AATGAAGAAG CAACCACCGT	240
TAAAAGCTAA GTTAAAATTA TATGAACAAA TGATTTTCGAA TGCACGTACA TTATCAGAAC	300
AAGGAATGTT TGTATCTGCG GAAACAATGC TCAATCAAAG TACGCTACCA CATTTACGAA	360
AAATACATCA AGAAGTCGTT CATGATATGA AATGTAGCAG ACACGAGATT CACCCTATGT	420
ATCCAGCTGA CTTTGCAAGT CAATTAAATG TGTTAACTCT AGCGGAAATG AAAAAGACAA	480

TGTTC CATG CTTAAAGGAT GATGAAGATC AAAAGTTACT ATCACGTTTA AGAAATGCTA 600
 AAAATGTAAC GACTAGAAAT GACCCGGATG GCCGTAGTCG TTAAATGTC AATGTATTTA 660
 5 CAGGTAATGT AATCGTAACT GATTTCGGAG ATGAAACAGG TACAATTTCC AATATACAAA 720
 AAGATAAATT AACAGATGTA TTTGATAAAT GGTTCCTC TGATCTTGCT AAATCATTAA 780
 ATTGTCATTG TTCCGAGTTT AGTTGTTTAG GGCCAAATGT TCTTGTTAAA AATATGTACT 840
 10 ATCCGAATAT GGATTTTAAA GATAATGAGC GTCATATGCA CAAACAACCA CAAATTATAC 900
 AATTTTAAAA ACTCTTAATT ATGCGGAGAA GCACCTTATC GATAAGTAGT CTCCGCATAT 960
 15 TTTAATGCTA TTATAAAATA AAAACAATT AATTGCTGGC AGTACTCTAC TTAAATAATA 1020
 AAGGGCATTG AATAGGACTA ATAGTCTATA ATAAAAGGGG TAAATTTTAA CTAAAAGCAT 1080
 AAACGTGCAT AATCAAAAAG ACAGATTGTA GGTGGAATAT TCGAaCATAA CAGTTCAATT 1140
 20 CATCCTTAAC AATCTGTCTT TATATTTTAA GTCTCTAATA TGTTGCACCT GAGCTAAATA 1200

TTCAATTGTT gTTTACTTtC AaTGCGaCgt GCTTtCtCtC GTtCaCaCg TgwGGTGCTG 1260
 TATCATAAAA CCATTTTCA ACATCATCTT CTGGATATAC ACCAGGTACA TGTTTAGGTT 1320
 25 GCCTTCATCA TCTAACGCAA CAAATGTAA 1349

(2) INFORMATION FOR SEQ ID NO: 712:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 712:

GAAATTAAAA AAGCAATTGG ACAAGATGCA ACAGTGTCTAT TGTTTGATGA ATTTGATAAA 60
 40 AAATTATACA CTTACGGCGA TAACTGGGGT CGTGGTGGAG AAGTATTATA TCAAGCATTT 120
 GGTTTGAAAA TGCAACCAGA ACAACAAAAG TTAAC TGCCA AAAnCAGGTh GGCCTGAATG 180
 GAACCAGGAG GAAnTTGAAA ATATGCTGGG GATTACATTG TGAGTACAAG TGAAGGTAAA 240
 45 CCTACACCAG GATACGAATC AACAAACATG TGGAAGAATT TGAAAGCTAC TAAAGAAGGA 300
 CATATTGTTA AAGTTGATGC TGGTACATAC TGGTACAACG TCCTTATACA TTAGATTTCa 360
 TCGGTAAAGA TTfAAAA 377

(2) INFORMATION FOR SEQ ID NO: 713:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 713:

	AATGAAnCGA AAAATGACTA TAAAAAGTTT AAAGTGTTTT CACTTATTTT AACACTTGTC	60
10	ATTGTCATTT TAGCAATTAT AAGATTTGTT CATAAAATGA TGTAATTAGA GTGAGACATT	120
	GTTTATATGTC TCAGGATCCA GTTATTcATT ATATCTACAA TATTTACGAT TATATAAATA	180
	ACCCGAGATT TTAGTATGAT TCATTtCACT AAAATCTCGG GTTTCTATTT GATAATTTTT	240
15	AATGGGATAT GGCATGTATA CGTTCTTGCC TTTtATCTCA TTTCCAATGA TTAATCTGGA	300
	TATTGTTCTA AAAATGCTTT CGCTTCTTTA TTAAGTGTGTT TAAAATCAAT ACCTTGTTGC	360
	ATCGCTGCAA AGACACATCC ACAATAACAC TGCCTAAAGA TATTATAGTC ATTACACATT	420
20	TCTATGGaAC GCTCATAACC TTTACTTTTC yTAAAATCAC TTGGcAAATA GTTCACaTCG	480
	TATATTTTTT GGACATCCAT ACCAAGTTCA TTGATTAATT GTGCGTTC	528

(2) INFORMATION FOR SEQ ID NO: 714:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 731 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 714:

35	TTTAATGGCA TGAAGTCACA GTATATAAAG AATCTGGTGT GACAATCAGT ATGACTAAGT	60
	ATATAAAAAA AGAGCAGGTG cGAAATAATG GCGAAAGAGT CGAAATCAGC TAATGAAATT	120
	TCACCTGAGC AAATTAACCA ATGGATTAAA GAACACCAAG AAAATAAGAA TACAGATGCA	180
40	CAGGATAAGT TAGTTAAACA TTACCAAAAA CTAATTGAGT CATTGGCATA TAAATATTCT	240
	AAAGGACAAT CACATCACGA AGATTTAGTT CAAGTTGGTA TGGTTGGTTT AATAGGTGCC	300
	ATAAATAGAT TCGATATGTC CTTTGAACGG AAGTTTGAAG CCTTTTTAGT ACCTACTGTA	360
45	ATCGGTGAAA TCAAAAGATA TCTACGAGAT AAAACTTGGA GTGTACATGT TCCGAGACGT	420
	ATTAAAGAAA TTGGGCCAAG AATCAAAAAA GTGAGCGATG AACTAACCGC TGaATTaGaG	480
50	cGTTcAcYTT CTATcAGTGA AATAGCTGAT CGATTAGAAG TCTCAGAAGA AGAAGTGTTA	540
	GAAGCAATGG AAATGGGACA AAGTTATAAT GCGTTAAGTG TTGATCATT CATTGAAGCT	600
	GATAAAGATG GTTCAACTGT TACGCTATTA GATATTATGG GGCAACAAGA TGACCnTTAT	660

CGAGAAATCA T

731

(2) INFORMATION FOR SEQ ID NO: 715:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 830 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 715:

15	TTTTAGrGGa AAGCGaATTa GtCaTATwCg CaGCAGATwG aATGATTGaA AAmGaAATTG	60
	aTTCGATTCC AATTGTAAGA AAAAAAGATA ATCAAAAGTA TGAAGTAATT GGAAGAATTT	120
	CCAAAACAAC AATAGCTAAG TTATTAGTAG CATTATATAA AGAATAGGTG AGAAGTAATG	180
20	GAAAAAATTA AAATTATCGT AGCTTCAGAT TCTATAGGTG AAACGGCAGA GTTAGTTGCT	240
	AGGGCAGGTA TTTCACAATT CAATCCTAAG CAATGTAAAA ATGAATTATT AAGATATCCA	300
	TATATTGAAT CTTTGAAGA TGTTGATGAA GTGATTCAAG TTGCAAAAGA TACAAATGCT	360
25	ATCATTGTTT ATACACTTAT TAAACCTGAA ATGAAGCAAT ATATGAGTGA GAAAGTAGCA	420
	GAATTCCAAT TGAAGTCTGT CGATATCATG GGGCCATTAA TGGATTTATT ATCTGCTTCG	480
	GTTGAAGAAA AACCTTATAA TGAGCCAGGT ATCGTTCATA GATTAGATGA TGCATATTTT	540
30	AAGAAAATTG ATGCGATAGA GTTTGCAGTT AAATATGATG ATGGTAAAGA TCCTAAAGGA	600
	TTACCTAAAG CTGATATTGT TTTACTTGGT ATTTCGAGAA CTTCAAAGAC ACCATTATCT	660
	CAGTATTTAG CGCATAAGAG TTACAAAGTT ATGAATGTAC CGATTGTACC AGAAaGTGAC	720
35	ACCGCCAGAT GGCTTATATg GATATTAATC CAAAGAAATG TATCGCACTT AAAATAAGTG	780
	AAGAnAAATT AAATCGCATT AGAnAAGAGC GACTAAAACA ATTAnGACTA	830

(2) INFORMATION FOR SEQ ID NO: 716:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 1159 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 716:

50	nGAAGAACAA GTTTAnCATC TAAATGCCCG TTAAAACTA CAACTACTTG ACGATGTTAA	60
	ATCAGTGTtT AAnTCTCAAA TGACGCAAAA TAGTGATTTT AATGAAGAAA AGAAAGTGTC	120

EP 0 786 519 A2

AGAACGTATA AAAAAATACT TTAATAAGCA ACTCACTGAG CAAATTGCAC CAATCGTTCA 240
 ACAATTAGCA GATTTACATG TCATTATTAA TCCTCAGTTT AACTTTGAAT CAGCTAATAT 300
 5 AGAGCAACCA TTATTGCACA TCGATTTCOA CGATATGCTA AATGCATTGC CTAAACAATT 360
 AACAAAACGT AAAATTTTGA ATCCAAATGG GCAAAGAGAT ATACATGAAT CAATTTGTCA 420
 AAGTACGTTA GGATTATTAC AACCACAAAT GGGATTATTG AGGCAACAGC TTGAATTATA 480
 10 TGTAAGCAA ATGGCTGTAG AAGCTGAATC GCAATTTGAA AGTTTTGAAG CTAATATTCA 540
 AACGCAAATA AACGATTTAT TAGCATTGTA TTTAGATACA ACACCTATCA ATCAATTGAA 600
 AGATAAACAT CAACAACTGA AACTATTTT ATATTAAGAA AGAAGGAACG TTTTAAATGC 660
 15 CTAATAAAAT ATTACTTGTA GATGGTATGG CGCTATTATT TAGACATTC TATGCTACAA 720
 GTCTTCATAA ACAATTTATG TACAATTCAC AAGGTGAACC TACAAATGGA ATACAAGGAT 780
 TTGTGCGTCA TATCTTTTCG GCAATACATG AAATACGCCC TACACATGTA GCTGTATGTT 840
 20 GGGATATGGG ACAATCAACT TTTAGAAATG ATATGTTTGA TGGTTATAAG CAAAACGTT 900
 CTGCACCACC AGAAGAATTG ATACCACAAT TTGATTATGT TAAAGAAATT TCAGAGCAAT 960
 25 TTGGCTTTGT AATATTGGC GTTAAAACT ATGAAGCGGA TGATGTTATA GGTACATTAG 1020
 CACAACAATA TTCAACTGAT AACGATGTCT ATATTATTAC GGGCGACAAA GATTTACTGC 1080
 AATGTATTAA TGACAAATGT GAAGTTGGCT AATTAAAAA GGTTTAACAT TTATAATAGA 1140
 30 TATnCATAC ATCGTTTTn 1159

(2) INFORMATION FOR SEQ ID NO: 717:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 574 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 717:

GATTTAATCA ATGCAGTTGC AGAGCAAGCT GATTTAACTA AAAAAGAAGC TGGTTCAGCA 60
 45 GTAGATGCTG TATTCGAATC AATCCAAAAC TCACTTGCTA AAGGTGAAA AGTACAATTA 120
 ATTGGTTTCG GTAACCTTGA GGTACGTGAA CGTGCTGCAC GTAAAGGTCG TAACCCTCAA 180
 ACTGGTAAAG AAATTGATAT CCCAGCAAGT AAAGTTCCAG CATTCAAAGC TGGTAAAGCA 240
 50 TTAAAGATG CTGTAAAATA ATTTTACTTA AAAAGCCCTG AATAAGGGCT TTTTATTTTG 300
 CTTTAAATAC TTACAACCTG TACATAAATT GTAATGTTCT TCTAAGTTT TAATCTTTGG 360

AACTACAAAA TATACATATG aATATTGaGa TTAATTGTTA GCGTTGaATT TACTTAAAAG 480
 GTAACCATGT CTACTATAGT ATTTTACGTT ATTTAAAAAG ATGAATAATG TAAATGAAGT 540
 5 AAAGGTTATT ATGAGAATTA CAAAAGCTAC ATAA 574

(2) INFORMATION FOR SEQ ID NO: 718:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 493 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 718:

AAGaTATTGA AAmTGMaATG GaGCACGCCC TTATTTGATA GAAGTAAAAG ACATTTAATT 60
 20 CTTACCGATG CAGGTCAAAT TTTTATGAG AAAAGTAAAG AAATTGTTGC ACTGTATGAT 120
 TATTTACCAT CTGAAATGGA ACGCTTGAAT GGACTGGAAA CAGGACATAT AAACATGGGC 180
 ATGTCGGCAG TCATGAATAT GAAGATTCTT ATCAATATTC TTGGTGCATT CCATCAACAA 240
 25 TATCCAAATG TTACATATAA TTTGATAGAA AATGGCGGTA AAACAATTGA ACAGCAAATT 300
 ATCAATGATG AAGTAGATAT AGGCGTGACC ACTTTGCCAG TCGATCATCA TATTTTCGAT 360
 TATACTACCC TAGATAAGGA AGATTTGCGA CTTATCGTGA GCAGAGAGCA TCGACTCGCA 420
 30 AAATATGAAA CTGTTAAACT CGAAGATTTA GCAGGTGAAG ACTTCATTTT ATTTAATAAA 480
 GACTTTTACT TGA 493

(2) INFORMATION FOR SEQ ID NO: 719:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1257 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 719:

GCATTGCCAA AACAATACGT TTATATTATT GAGGAACTAC TGTATAAAAG TAATGAATAT 60
 45 CAAAATAAAA AATCATATTA CGAAACACTT GTTAACCAAG TAATTGAACT TAAACAGGCA 120
 GATGATTTAA TTATTGGACT CGCTTATTCC GTACAACGCT TAGTCGTCGA TCATTTACAC 180
 50 GTTGTCCGTG ATATTTATGA TCGTGGACCA CAACCAGATA AAATTATGGA TACACTGATT 240
 AATTATCATT CCCTAGATAT TCAATGGGGT AATCATGATG TGCTTTGGGT TGGAGCCTAT 300

GATATTATCG AAGACGCTTA TGGCATTAAAT TTAAGACCAC TGCTTACTTT AGCTGAAAAA 420
TACTATGACG CAGATAATCC TGCTTTTAAG CCTAAAAAAA GACCTGACAA ACACGAACGT 480
5 TTAACCTCAAC GTGAAGAAAG TCAAATTACT AAAATTCATC AAGCTATTGC GATGATTCAA 540
TTCAAGTTAG AAATACCAAT TATTAAACGT CGTCCAAATT TCGAAATGGA AGAACGTCTT 600
10 GTGCTTGAAA AGGTTAATTA TGATACAAAT GAAATTACAG TTTATGGTAA TACATACCCA 660
TTGAAAGACA CATGTTTCCA AACTGTCAAT CGTGATAATC CAGCAGAATT ACTACCTGAA 720
GAAGAAGAAG TCATGAATAA ACTATTATTG TCATTCCAAC AATCTGAAAA ATTACGTCGT 780
15 CATATGTCTT TCTTGATGCG TAAAGGCTCT CTTTACTTAC CATATAATGG CAATTTACTC 840
ATTCATGGTT GTATTCCAGT TGATGAAAAT GGTGAGATGG AATCATTTGA AATTGATGGT 900
CATACTTACA GCGGCCAAGA ATTATTAGAT GTGTTTGAGT ATCATGTCCG TAAATCATT 960
20 GATGAAAAAG AAAATACTGA TGACTTATCG ACGGATTTAG TTTGGTATTT ATGGACTGGG 1020
AAATATTCGT CACTATTTGG TAAACGTGCC ATGACTACGT TTGAGCGATA CTTTATTGCA 1080
GATAAAGCTT CTCATAAAGA AGAAAAGAAT CCGTACTATC aTCTTCGTGA AGATGTGaT 1140
25 ATGGkTCGTA AAATGCTCaG TGaTTTCGGA TTAAATCCAG ATGAAGGACG CATTATTAAT 1200
GGTCACACAC CAGTGAAAGA AATCAATGGC GAGATCCTAT CAAGGCTGAT GGAAAGA 1257

(2) INFORMATION FOR SEQ ID NO: 720:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 400 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
35 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 720:

40 TGAGCACATG ACAGTGGCTG AAAACATTAA ATTTTTTAAA TCACTTTGTA AAAATCCAAT 60
TAACGATACA ACTATCAACG AATATTTACA GCAATTAAAC TTTGATGATA CGTCTGCCAA 120
AGTATCTACA TTGTCCGGTG GGAATAAACG TAAAATTAAT ATATTAGTAG GTTTACTAGG 180
45 TCAACCTCGA ATTCTCATT TAGATGAACC GACAGTTGGT ATTGATTTAA AATCTAGACA 240
TGACATCCAC CAACTACTTA ACATCATGAA ATCTAAATGT TTAATTATAT TAACTACCCA 300
50 TCATTIAGAT GAAGTTGAGG CACTTGCAGA TGGTTATCAA GTTAATTGGG CCAGGTnCCC 360
TTTTnTTCAA CAGTTTTTGG GGGCCAACCA TGGGCTTATA 400

(2) INFORMATION FOR SEQ ID NO: 721:

(A) LENGTH: 570 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 721:

10	CTTATTTTATA TTATAATATA AATATTTTAT TTTTCAATAC TTAATTTTAA AAATCCCCTA	60
	TGAAAATGTT GATGAGCTAC ATCTTTAAAT CTTATTATAC ATTGTATAAA ATTATATTGC	120
	GAGGTAGTAA ATTGATATTA TACACTTTTG GTTGTGTATG CATCTCACCT ATCTTTTTTG	180
15	CTTTTTTCAA ATAAGAAAGT ATTAAAAATy AATGCCTATA CAGGAACAGA CATGGCTAAA	240
	CTTGATTTAA ATAGTCTTGA CGACGAGCAC GTAAAATTAT TAATAAATGA ATTAAATAT	300
	CCAGAAACTC ATATCGATGT AAATGAATTA AAAACAATAG TTGCTAGTCG AATAAATGAA	360
20	AGGCAAGAAA TAATAAGTTT TAAGTTAGGA ATAAAGTACT TATTAACAAT AAAAAGAGGG	420
	AACATAGAAA AAGATAGGTT TTCAATTTC AATCATTTTCA AAGATACCTA TCACACCCTA	480
	GTTAGAATAG ATATTAAACGG TGGTACTCAC GATAATCCAG ATGGAACAAT CGCTCCGAAA	540
25	AGTCATATTC ACATATATAA TGATAAGTAT	570

(2) INFORMATION FOR SEQ ID NO: 722:

30

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 722:

40	ATTTTAGTCT TAGGTGTTGA TTGCATGATG AATGCAGAAG TTATACCTGC AGCCATATTA	60
	GCACCTTCAT TATTGTGTAT AATTTGAATA TTATTTGCTT TTAAAGTATG TCCAATTAAG	120
	TTTGAAGTCG TTGTTTTACC ATTTGTTCCA CTGATAAATA CAATATCATC AACTTGCTCT	180
45	GCTAATTTTC TTAATATATC TGTATCCACT TTTCTAGCGA TTTGTCCAGG TAAATCTGTT	240
	CCTCTTTTAC CTAAGTCTCT ACTTGCTTTA CGCGCCAATT TCGCTAGATG GATTGCCGTC	300
	CACTGTCTCA TGTGTTTCCT CctCAAATt CCACTCGCAT CATTATAACA TGACAAGGCA	360
50	ACTTCAAAAA AGTTTCTCAA TCACAAATng ATACCAGTGT	400

(2) INFORMATION FOR SEQ ID NO: 723:

55

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 1113 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 723:

	GATTATATGC TGTGGCAAA ACAATATACC CAGATGAATT TTTATTTTTA GTAATAGTAT	60
10	AACCATGCTT TGTCTTACTA ACTTTGACAG CTTCTAATGA ATTTGAAGCG TCTTTAAGCG	120
	TGGTATAATC TTCGCCGTAT ATCCCTTTTA AATTTACTCG ATACTTACCT TTAGGCAATG	180
	ATAATCTAAT TCTATCTGGA GCTTTAATGC GTATCGTTAC GGGTGTTACA ACGCGTCGAT	240
15	ATTTATAAGT GAGTTTATTT CTTTCTTG TG TATATTCATT CACTTTAACA TCATGAGCTT	300
	TATCCGGCGA AAGTAATTCT AAATCCAATT CAAAATACAA ATCTTTAAAT TGATTAGAAA	360
	CTGATTTTGG CAACTGTACA GTTAGACCAC CATTATTTTG TTAACTTGT AATAAATGTT	420
20	TTGTAGGAGA TTGCCAGGCT GCACTATTTA ATTTAATTGT TGAATCTGAT AGTAAATTTT	480
	TATTGGCTTT AAAATGTGTA TTAACATCTT TAATATTGTT AGAAACAATC CCTTGCAACA	540
	TTGCTTGTTT TTTATCTAAT GGAGATTTTA ATTCTTTATT GGAAAAGACC TTATTTGTAA	600
25	TATGTGCACT TGGATAATGG ATGGTATTTT TAGAATGAAT CCAACGAACT TTATTGTCTT	660
	TGTGTTTCAGA CTTAATTTTA AATCCATATG GtAAGTTGTC ATCATGATtC ACTCTAATTC	720
30	GATCATTAAAC ATTCCAAAGT GATAGTaaAT TTgACGATgC CAAGTAATCT ATAAGTGCTG	780
	TTTTTATCGA TTGGCATATT AATTGGAGT GTCTTGTCAT AATATTTTAA AATGTCTCCA	840
	TTAAAATAC TAGAATATAA TGAAATGCCA TTATAATGAT ATATAAATGG TGAATTTAAT	900
35	GCATAGTCTG ACATATAATC AATGCGATTA AATGAGCCTG TTGCATTTTG ATTTATCTTT	960
	TTTATAAGCT GGTTTACATA GTTACTATGG TAATCATGTT GTTTCAACGT TGATAATGAT	1020
	TGTTGATAAG GTTTGATTGC CATGTTTTTG TTGTTATCTA AAATGACGAT TTGTTGAATC	1080
40	ATaACGATTA ATACTAATAT TGCAACGGTT AAT	1113

(2) INFORMATION FOR SEQ ID NO: 724:

45

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 464 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 724:

	TGCCGTTTAG CAAAATCTAG TATCGCTTGA TGATCAGATT CTGAAATTC AGTGTGTACT	60
--	--	----

55

GATTGATTAA GTTTATATGC AAGTGCATGT TCTCGTCCAC CAGCACCAAT TACTAATACA 180
 TTCATTTATG TTACGCCCCCT TTAAAATTAG TGTTTAAAAT GTCGAGTGCC TGTGACTACC 240
 5 ATTGCAATAC CATGTTTATT AGCCATATCA ATTGAATCTT GATCTTTAAT CGAACCACCC 300
 GGTGGATAA TTGCCTTTAT ACCATGTTGT GCTGCAAGTT CAACTGTATC TCCCATAGGG 360
 AAAAATCCAT CAGATACTAA CGGCTACATG ATCATTGATT TCAATAGCTC TCTCTAACGC 420
 10 AATTTTAGCA GCACCGACAC GATTCATTGG CCAGCAnCTA TACC 464

(2) INFORMATION FOR SEQ ID NO: 725:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1440 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 725:

GTTAAATnCA nTATTnAAA TaTATTACCT TATTAGAAAA AGTCGTAATA TGAGGTGTAC 60
 25 AAATGACGCA AATTTTAATA GTAGAAGATG AACAAAACCT AGCAAGATTT CTTGAATTGG 120
 AACTCACACA TGAAAATTAC AATGTGGACA CAGAGTATGA TGGACAAGAC GGTTTAGATA 180
 AAGCGCTTAG CCATTACTAT GATTTAATCA TATTAGATTT AATGTTGCCG TCAATTAATG 240
 30 GCTTAGAAAT TTGTCGCAA ATTAGACAAC AACAACTAC ACCTATCATT ATAATTACAG 300
 CGAAAAGTGA TACGTATGAC AAAGTTGCTG GGCTTGATTA CGGTGCAGAC GATTATATAG 360
 TTAAGCCGTT TGATATTGAA GAACTTTTAG CAAGAATTCG TGCAATTTA CGTCGTCAGC 420
 35 CACAAAAGGA TATTATCGAT GTCAACGGTA TTACAATTGA TAAGAACGCT TTTAAAGTGA 480
 CGGTAAATGG CGCAGAAATT GAaTTAACAA AAACAGAGTA TGATTTACTA TATCTTCTAG 540
 40 CTGAAAATAA AAACCATGTT ATGCAACGGG AACAAATTTT AAATCATGTA TGGGGTTATA 600
 ATAGTGAAGT AGAAACAAAT GTCGTAGATG TTTATATAAG rTATTTACGA AACAAAGTTAA 660
 AACCATACGA TCGTGACAAA ATGATTGAAA CAGTTCGTGG CGTTGGGTAT GTGATACGAT 720
 45 GACAAAACGT AAATTGCGCA ATAAGTGGAT TATTGTTACC ACGATGATTA CGTTTGTAC 780
 GATATTTTGG TTTTGTTTAA TTATTATTTT TTTCTTGAAA GATACACTGC ATAATAGTGA 840
 GCTTGATGAT GcAGAACGAA GCTCaAGCGA TATTAATAAt TTATTTCaTT CTAAGCCTGT 900
 50 TAAgATATA TCTGCaTTAG ACTTGAATGC aTCTTTAgGT AaTTTTCaAG AGATAATTAT 960
 TTATGATGAG CATAATAATA AATTATTTGA GACATCGAAT GATAACACAG TGAGAGTTGA 1020

ATATTTAATT ATTAAAGAAC CAATTACAAC GCAAGATTTC AAAGGGTATA GCTTGTTAAT 1140
 TCATTCAC TA GAAAATTATG ATAACATCGT AAAATCATTG TATATCATTG CGCTGGCATT 1200
 5 TGGAGTGATT GCAACAATTA TAACTGCCAC AATCAGTTAT GTATTTTCAA CACAAATTAC 1260
 TAAACCGCTT GTCAGTTTAT CAAATAAAAT GATTGAGATT CGACGAGATG GTTTTCAAAA 1320
 TAAATTGCAA TTAATACAA ATTATGAAGA AATAGATAAT TTAGCAAATA CGTTTAATGA 1380
 10 GATGATGAGC CAAATTGAAG AATCATTTAA TCAACAAAGA CAATTTGTTG AAGATGCGTC 1440

(2) INFORMATION FOR SEQ ID NO: 726:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 375 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 726:

TGATATTC CG ACTTGCGAGG ATTATTGCGC ATTAAGGATT AACGCAGTAT GAGTCCAAAG 60
 25 ACGCGCGACA CCTGGAAAAA GGATTACCTA ATGCCTTATT TACAGTAACC TTGTATGATA 120
 AAGATCGGTT AATTGGTATG GGTAGAGTGA TTGGCGATGG CGGAACTGTT TTTCAAATTG 180
 TTGATATTGC AGTTTTGAAA AGTTACCAAG GTCAAGGTTA CGGCATCTAA TTATGGAGCA 240
 30 TATTATGCAA TATATTAAAG GTGTGGCTGT TGAGAGTACA TACGTTATCT GATTGGCAGA 300
 CTACCCAGCG GGnTAAATTA TATACCAAAT TTGGGTTTnA TACCTACCGA ACCAGAnTCC 360
 AGGCGGTGAT GTATG 375

(2) INFORMATION FOR SEQ ID NO: 727:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 727:

TAAAAA ACTT AGAGATGAAA ATCATATTAT TTATCTGTTT TTGGGACAAT TTTTACTAA 60
 AAATGAAGAT CCATGGCATC AAATACTTAA TGATTTAGAA GTTACAAATT CTGTTGATAA 120
 50 TTTTTTAAGG TCAATAAGTA ATAAGGCCAA AGAAACAAAA AAAAGAGCTT TTATTATTAT 180
 TGATGCGCTT AATGAAGGTG AAGGTAAAAG GTTATGGGGA AATTATTTTC AAAGCTTTAT 240

AGATGTTATA TTACCCAAAA ACGCAATACA AGATAACAAT ATTGTAGTAT TTCAGCATGA 360
 AGGTTTTAGT AAGGAAGAAA ACTATAATCC AATTGTATCT TTTTGTGATT TTTATGGATT 420
 5 AGAGCTACCT AAGTTACCTA TATTAAATCC AGAATTCAAC AATCCATTAT T 471

(2) INFORMATION FOR SEQ ID NO: 728:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1750 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 728:

TAGGATGTTT CACCCTgGCA ATTGcTCTAA GACATctAcA GCAGTAGAAT aycCTGTTTT 60
 20 CGTctTTTTA ATAACAGGTA ATTGTAATGT CTCAAACAAT ACAACACCTA ATTGCTTAGG 120

AGAATTTATA TTAAATCTT CACCAGCTGC ATCATGGATA TTTCGAATCA AGACGTCTAA 180
 TTTTCTTGA ATTTCTTTTT CCATTTCTTC TAAATCATGA ACATCTGTAA ATATACCAAT 240
 25 TTCTTCCATT TCACTTAAAA TCTTAGCTAG CGGTAGCTCT AAATCAGCCA AGAGTTCTAC 300
 CTGAITGTAT TCTTCTAATT GTTTATCCAT ATTTGGTTTC GCAAAGTAAA TTGCATCAGT 360
 AATAGAAGCA ACATATGGAT TTAAACATC ATCTTCAGGT ACCTTAAATT TCTTACCTTT 420
 30 TCCATATATA CTCACATCGT CTTTCACAAA ACTTTGACCG TACAATGAAA CAACTGATTG 480
 AACATCACTA ATCGTACGAG ATGGATCAAT TATATACTG GCCAACATAA TATCGAAAGA 540
 AATATTTTGA ATATCAATCC CCAATCTATG TGATGCTACA TATGTTTTTT TAGCATCATA 600
 35 TACGACTTTT TTCGAATTCG GATTTTCTAA CCATGAAACT AGTTCGACAT AATTATTTAT 660
 GTCATCCGCA TTAATTACAA TATGTTTCTC ACCTGtAAAT aAAGAGAATT TTAAAAtATT 720
 40 ATTTcGCAAA TAGtTACCAC CGtCTAATTC GAAATGGATG GCCGCTTCTT TcAATGAAGT 780
 AAAATCcAAT ATTATCAAAA GACGTTTCCa ATTTCAAATG TCTTtTCTAT TGCATCTTCA 840
 ACGcTtGCTG ATTGaTCAAT GTCAGCCAAC AATTGTTTGA ATTCTAACTT CTAAACAAT 900
 45 TCGATTTTTT CTGTTGTTC ATCTtGAKGA GTCATTAAAG TATCTTcAAG TTTTACTTcA 960
 ATCGGACTAT CTACATTAAt CGTTGCTAAT TCTTTACTCA TTAATGCATC TTCTTTGCTA 1020
 TTTTGAAGTT TTTCTTTTAA CTTTTTACCT GAAATTTcAT CTAAATGTTT ATAGACACCT 1080
 50 TCTACTGTGT CAAATTGGTT TAGCAATTTT ATTGCTGTTT TCTCTCCAAC ACCTGCAACA 1140
 CCTGGTATAT TATCAGAAGT ATCTCCcATT AATCCTTTCA TATCAATAAT TTGATTAGGT 1200

EP 0 786 519 A2

CCTTTTTTAG TGTAATAAAT GGTTACATTA TCCGTTGCAA GTTGTGTTAA ATCTCGGTCT 1320
 CCGTAATAA TAATTGTCTG AAAGCCCGCT TTATCTGCTT CTTTACTTAA AGTTCCGATA 1380
 5 ATATCATCTG CCTCATAGTT ATCTAATTCA TAACGTTTAA TATGATAAGC ATCTAATAAT 1440
 TGGCGAATAT AAGGAAATTG CTCACCTAGT TCAGGCGGCG TTTTCTGGCG TCCACCTTTA 1500
 TATTCACATAT ATTTTTCATG TCTGAAAGTC GTTTTACCTG CATCAAACGC TACTAAAAAA 1560
 10 TGATTGGCT TTTCTTCTTT TAAATCTTC TCTAGTAACA TGCAAAACC ATATACTGCA 1620
 TTGGTATGAA TGCCTGCTTT GTTTGATAAC AAAGGTAATG CATAAAAGC TCTAAACTT 1680
 AAGCTATTAC CATCGATTAA TACTAATTTA TTCACAATTT TAACCTCCAG AACTAATTTA 1740
 15 TATATnTGTG 1750

(2) INFORMATION FOR SEQ ID NO: 729:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 439 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 729:

AAATTAATTT TAACATCCTT TCAAAATAGT TTTAACGGAT CcTCCcAAAA CGTAAACTCA 60
 30 CATCAGTTAC TTGTAACATG CATTTTCTCC TTTTTCAT TCGATATTCT AACGGAAGAA 120
 TTATATCATA TTATCGTCAC AGTTTCGACC TCATATAAGT TGTAATGATA GAATGACTCA 180
 35 CACATGTTAT AATAATAAAG AATACAAGAA TCGAAGGAGA ATAAACATGG CATTAGACAA 240
 AGATATAGTA GGGTCTATAG AATTCCTTGA AGTAGTAGGG TTACCAAGGT CAACTTACCT 300
 TTTAAAGGAC CAACGGTGAA ACGTAAAGTT AAACCAATCA GAATGAACGT GATGATTGAA 360
 40 TTAGAAGTAG GGGAGnATAT AGTTCCTCAT TTATCCAACC GGTGAGGTGG ATTATTGCAC 420
 TCAAATATGC nGnTATACG 439

(2) INFORMATION FOR SEQ ID NO: 730:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 481 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 730:

AGTTTAGGAT TGATGACAAA GCCATTACGA CCAACAAATC CTAACCTGC ACGTTCTGCT 120
 ACTGCCCTAT CTGATAATAC ACCCGTATCT ACCATAGATT TGATTTC AAC ATCTGGAACT 180
 5 TTAGATTCAA TAAATGCAGC TAACATGTCT AATCGTTTAC GCATAATTGT ATGATAATCT 240
 TGACCCACAG ATGCTCTAGC AAATAAGCCT CTGCGATCAC CTCTAACACT CTTAGGTGCA 300
 CCTTTCAGTT TGTTAGGATA ACCAACTGCA ATTGCTATGA TTGACCTTGC TGTTGGTAAG 360
 10 GATAATTTAG GCTCCGTTTCG TAAAGCAATA TCAGATTCTT CAAaTCCTGA GGCATAACCA 420
 TTTGCATGAT ATGCTTCTAG CTTTGTCTTC AATTCAATCA AGGGnTCGGC AGTAGTAAAT 480
 15 C 481

(2) INFORMATION FOR SEQ ID NO: 731:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 828 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 731:

GTGATGAAAA ATCTTTTTCT ATTGATTGAG AAAATAGTTA TTTATATAGT TTTTAAAGAA 60
 AAAAAGTGAT AATATTTAGC TAATCTAATG AAAATTGATT TATTGGACAA AAAATACATT 120
 30 TTAAATGAGT AGAGGAGGCT GCAAWTGGGT TACAGAACTT TAAAAAGTAT TTTTCATGAA 180
 CACAATGAAA GTAAAAATGAA GGAAGAGTAT ATTAAAAGAT TTAATTCTTT mGCTTCTTTTC 240
 AATACTAATA TTAATATCAT ACCTATGGAA AATGGAAAAA AAGTTAATGA TTTGGAATAT 300
 35 CCTCTATTCT TTATGGTGAC TAAAAATCTA TCAAAAAAAC AAGAATTAAT ATCAATTAAT 360
 AGTAGAAAAA TTGATAGAGC ACTTAATTCT TTACCATATG CAGCTAGAGA ACAATATTTT 420
 40 AATGATTTAT TAATCGATGA ATTACAAAGT ACTAATGAAA TTGAAAATGT ATTTAGTACT 480
 AAACAAGAGA TTGCACATGC GTTAAATAAC CAAGCATCAG AATTTCTTAA GTTCAGAGGC 540
 CTCGTGGATC AATATAAAGA GATAGAACTT AATAAAAAAA TTAAAGTTGA TAATGTAAGA 600
 45 GACATTAGAG CGATTTATGA TAAATTAGTT TCAATGAAA TTAACGAACA AGATAAGTTA 660
 GATGGAGAGC TATTTCTGTA AAATTTTGTG GGTGTGCATG ATGGGTCAAC GAATAAATAT 720
 ATACATGTTG GGTTACAACC TGAAACCAAA ATTGTTGAAT TTATAGGTGA AATGCTAACA 780
 50 TTTTAAAAAT ATTTTGATGC GCCTCAGCCG TTCAAAATCA TGGCTAGT 828

(2) INFORMATION FOR SEQ ID NO: 732:

(A) LENGTH: 1622 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 732:

10	CGTATGTTTC GAATTTTATG nATTGCATTG GATAATAGTA CCAGTTAAAA GAACTAAGAT	60
	TGTAATTATC CCCCCTTAAA ATTCAAGAAT ATATTTTCTT AATCTATCAG CAAGAGGTTA	120
	TATTTCAAAG TGTTTATTTT TAAAACAACA TCTAAAAGCC ATTTcATAAt AAwGTAAAT	180
15	CaTTAGaATG TATAAGATT CCaATTAATA AAAATAGATA AAATGCAATA AAGTTCCAAA	240
	TACTTATTAT TATTCATCAC AAATTACGTG ATGCCCTCTA CAACACTAAA TCAAGGATGA	300
	TATTTATTTT ATATACATTA GCATTCATTG TTTGCTTACC CACATTATCC TGTTTAGTCT	360
20	TTTTTATAAC TCTAGTCTTG AATGTCATAT TTACAAAGAA AAAAACACTA AAATATTTAA	420
	AACTAACACT ATTTATTAC TTTGTTCTTT TATAGCACCT TTTATGTTTA TTTTCTTGTA	480
	TTCAATAAAT AGTATGGAGA TGATAATTTA AAGTAGATAT ATTGAAGTA TACTATAGAG	540
25	TAAATTATAT TGGGGAAATA TGTAACGAA CCGGTTGATT TTATAGTGA TTAACACTTC	600
	ATAGAGAATA TAATCAAGAA CAAAAACAGT CAATAGGTGT GAATTTTTTTT AAAGACGGAT	660
30	CTGTTGCTAC TAAAAAAGA AGTATACAAT TCAATAGTTA AACCTTAAAA CAAGAAATAT	720
	TATTCAAAAT CAATGAATTT CCTATCTTAT TAGTTTAAAC AATATTTATT CTCATAGAGT	780
	TTGTCCAATT AAATATAGAT GATTCAAATA TTTATAAGCA TACAAAAGAG CAGTAAGACA	840
35	TTTTCTAATA GAAAATAACT TTACTGCTCT TTGTACATTA CTCATCAACT ATTGTAAATT	900
	AAATAATAAA TAACTACCTA TTTTATTATT CAGCTAAAAA ATGCTCTGCT AAATATTTTG	960
	CTGCGCCATC CTCTTCATTG GTGTATGCCG TTACATCTGA AGTTAATGCT TGGATTTTCAG	1020
40	GGCGTGCAAT TTTCATAGCA ACTGTATAAT GACCAAATTC AAACATTGCT CTATCATTGT	1080
	CGCTATCTCC AATAACTAAC GTTTCTTCTT GATGAATACC AAAATGTGCA ATCATTCTT	1140
	TAATGCCTGT ACCTTTATCA GTTTGATAAG CCATTGTTTC CGCATTAAAT CTTGATGAAT	1200
45	TTGArACACT AATCTGTAGT TGCACATGAT TTTGCTTTAA TTCATCTCTA AATGCTGTTA	1260
	TTTTTTCTAA ATTAGAACTG AATAGATAAA TTTTGAATA TTCACCTTCA GGAAACTTAG	1320
50	TTACCCAATC TATCTTACCA GCAAGCGCAT CTTGTCTTGA AGACCATTCA CTATGACTTA	1380
	CGCCATTAAT AGGATCTTGA CTACGAATCA TATCTCGCAT CCAATGTTTCA TCTTCTTTTA	1440
	AAGAACTCT ATTACCTTCA AAAGGAAATA CCTCATAATA AATTGTTGG CGCTTAGCTA	1500

55

CTACTTCTCC AATTGTTCCA TTGAACTAA TGATGCCATT AACCGCAAAA TCTTGAGGTA 1620
CA 1622

(2) INFORMATION FOR SEQ ID NO: 733:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 472 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 733:

AATGCCAAT AAATCCAAAT TCTTTTAACG AACAGAGTG CCAAGTTAT TGCTGATCGT 60
TATGCCAGAT AAGCATATCA ATGATAATTA TGGTTTAGAA AGAATTCTA AGACAAATCA 120
TGGATATAAT TATGTGTATT CCAATGATAA TTCAACTAGT AAGCAACATG TAAGTATTTC 180
AAATCAAGGC ATAATAACGA AATAATAGAT GGAACAGTGT ATTCTAATTG GATATACTGT 240
TTTTATTTTG CAATAATTTA ATTTAAAAAG GTGAATTCAA CTTATAAAAT GATGTAAATG 300
TTATGTCAAA ATCAACCAAT CCGTAATGTA TTTTAAAATG TTAATATAGT TCTGAAGAAG 360
TATAAATGAG GTGTTGAAAT GGCTAAAAAT AAGAAAACgA ACGCGATGCG TATGCTTGAT 420
CGTGCAAAAA TTAAATACGA AGTTCATAGC TTTGAGGTAC nTTAAGAACA TT 472

(2) INFORMATION FOR SEQ ID NO: 734:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 734:

CATAGCCCCA AATTTTTTCT ATTATTTGTT CACGAGTAAA GATTTGCTTA GGACGTGCTG 60
CAAGCATAAA TAATAATTGA AATTCCTTGT TCGGTAACGT CATCGTTTAA TTAGATACTT 120
GGAGTTCCAA ATAGGATTGG TTTAGCGTTA AGTTGCCAAT AGTCATTTCT GAATTGGAAT 180
TGATATTATA TCGACGTAAT ACAGCACGAA TTCTAAAAAT AAGTTCCTTA ACCTCAAAGG 240
GTTTGGTTAC ATAATCGTCA GTACCGCTTA TAAACGCACG CTCTTTGTCA CTAAGTGCAT 300
CCCGCGCTGT TAACATAATA ACTGGTATAT CATAATCATT TTTAATGTA TTACATAATT 360
GAAAGCCGTC CATACCATCC ATCATAATAT CTACCACTGc AATATCGaCA CGCTGTTTTT 420

GTTTTGTAA ATGGGCTAGC TATAATAATT TAGGGGATT

519

(2) INFORMATION FOR SEQ ID NO: 735:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 735:

ACTTGAAAAC GATAAACAGT ACTTCCAGC TACACATTGG AAAGCTATAA ATGGGATACC 60
 TTATGCAGGC AGTAGTGATA TTGATGGATT GCCTCAAGAC GGTATCATTT CGGTAAATGA 120
 TAAAAATAAA TTAGATAATT TAAAAATAGG CGAACAGGAA TTATTCAAAA TAGCATTGTA 180
 CAGAAATCCC CAAACGGTAA ATTGTGGAAA ATAACAGTTG ACGATAGTGG GAAACTTGGT 240
 ACAGTGCTAT TTTATTAGAA AGGAAGGTGC ATTATGGAAA ATTTGTATTT AATAAAGGAT 300
 TTGGGAGCTT TAGCAGGTCG AGATTATAGA GCTAAGGAAA TACAAAACCTT ACAAGGAATA 360
 GGCATTGCGC TGGGCTGACC ACCAGGGTTT AnGTGnCCnC 400

(2) INFORMATION FOR SEQ ID NO: 736:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 780 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 736:

CTTTTTTATT GAAAAAGTGG TATTTGATTA TCTATTTACT ATTTATATTA GCGGCACTCC 60
 TTATTACATT AACGACAATC CAACATGTAA CAGAAGATGA CAATCATnTT AATATAGGTG 120
 TCGTAGATAA AGATCAATCA AGTGAAACGA AATTAATCTT AACTCTATT GGTAAAGGGA 180
 GTAACCTAGG AAAAAACGTG AGCATTAAAG CATATGATGA TAAGCAAGCA CATACTTTGT 240
 TAAAAAACA TAAACTTCAA GGCTATTTTG TTTTGTATAA AGGTATGACC AAGGCATTTT 300
 ATAAACAAGG CGAACTACCA ATTTAGTAT ATACATATGA TCAACAATCC ATGAAAAGTG 360
 TCGTGCTATC TCAGCTAACA GATTCTGTTT ACCAACGTCT TATGCGATCA ATGGGTGGCA 420
 TCTTAGCTTT TCAAGACTTA GCACCGAAAG CATCACATTC TGACAGTATC AATGTTATGA 480
 CTGATTTGCT GATTACAGGA TTAAACCGTT CAGGTGCATt TAACTTAGAA CCGATTCATT 540

CACTATCTTT ATTTACAGTT TTGAAAATGA ATCAAGATAC TGTATTGAAA GCGCGATTGA. 660
 AAATGTTTCA TTTTCTAAA GAGCGTTTAT TAATCATTCG TACGTTGATT ACATGGTTTT 720
 5 ATACTATGTT ATGGGnGTAT CGnTGGTGTA GTTTGGAATG TGTTTCAGTA TTCCGAATnA 780

(2) INFORMATION FOR SEQ ID NO: 737:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 946 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 737:

TATTTAATTT CTnATTnTG GTTTTAATT nTAAGATGAC CATAAATGAA TTTCTTCTGC 60
 TGTCATAGAA TTAGAGCAAA ATACGAGCAT AAATTTAACT AATTTCTTGC TTGTCTTATA 120
 GTCTTGATTG CCTTGTA AAAA ATGTTAGTAT TAATTGCTTC ATCGTTTCGA ATTGTTGTGT 180
 TGATTTAATA GCGATTGCTA AACCTATATT TTTTTCGAAA AGCTTTTCAA AACATCTATT 240
 25 TAACAGGTTG TAATTCGTTT GGCTAATCTC AATATCGTGA ATATCGTCAA TGAAAACGAC 300
 AGGTTTTGGT AAGTGCTCAA AGTTAATATC GTAATATTCA TTGAAAATAA ATTGAAATAG 360
 TTCATTGAAA TTAATAAATC GAACAAATAC TTTGGCACGC TGAATTCGAT CTTTCGGATT 420
 30 AAAATCATCT ATATGAATAT CTGTTGTATT TGAGCCAGT TGAGCTGTTA AATCAATTGT 480
 TGAAATTAAC TCAGTGAATT GTGATACGTT ATCTTGTTGG AAGTGTATTT GTGGTGTTTC 540
 AGTAATCTTG GAAACGAGTG AACGGAAGTG TTTAGGACTA AAATGCAAGT AATTCCTAAA 600
 35 TTGATTTGCA AAATTTGTAT GACTGTAAAA ACCGGCCAAT TCAGAAACAG TTGTAATAGA 660
 ATGTTTTGTA GAAAGTAATA AATTGATGGC GTTAACAAGT TTAATACTTG TAAAATAATC 720
 TTTAAAATTC ATACTCAAAT ATCGAACAAA AAGATTAGAA CAATATGATT CAGAGATGTT 780
 40 GCAATGCATC GCTATATCTT TTAAGACAAA GTGCGCATCA ATATkGTCAT GAATATAGTT 840
 TACACAGTCT ATGAACACCG GATTGCTTAA AGCAATATTT GGTAAATATT CATGATCTAT 900
 45 TCTTATAAAA GCTTCTTTAA GTAAAGTGTC TATnATACTT TGACCT 946

(2) INFORMATION FOR SEQ ID NO: 738:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 738:

5	TTTATTTGAT GATGTACTAA AGCAAGATGA AAGATTTGTT ATTGTAGTTC AAGCATTAGA	60
	AGAAAAGAAC GGACAATTAT TAAAGAGAAC TTTAAGGGAA TATCCCGGTT TAAACCATAA	120
	ACAAATGAAT GATTTATTTA TGCACTTAAA GGAATTATTT TCCGAAGAAT CATTGTCTGA	180
10	AAACCAATCA GCGTTCAGTA TTACAGTTTA TACAAATTTA GATTATACTG CTGACCAAAT	240
	ATATGCTCAT GTAAAACGTT TCAGAGGTAA GCATGACTGG ACACAAACAG CTAAATAAAA	300
	TCAAGATGCT TGCAGTGgAT TkTAACmATT AATGtTAGaT gTCmCyGcAT TTTTaATGCC	360
15	ATTCCGTAAT TAATCCGGAT GGTCCAATTT AATTAAC	397

(2) INFORMATION FOR SEQ ID NO: 739:

(i) SEQUENCE CHARACTERISTICS:

- | | |
|----|----------------------------|
| 20 | (A) LENGTH: 915 base pairs |
| | (B) TYPE: nucleic acid |
| | (C) STRANDEDNESS: double |
| | (D) TOPOLOGY: linear |

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 739:

	CAAGGTATTT CATTGACCC ATTCACACCA TTAATAGTGG CAGCAGCATT ATACTTTGTC	60
30	TTAACATTTG TACTTACACG CATTATGAAC ATGATTGAAG GGAGATTGAA TGCCAGTGAT	120
	TAAAATAAAC AATCTTAATA AAGTTTTTGG AGATAATGAA GTTTTAAAs ATATCAATCT	180
	TGAAATCAAT CAAGGGGAAG TAGTAGCAAT AATAGGTCCA TCTGGTAGTG GTAAAAGTAC	240
35	ATTGTTAAGA TGTATGAATT TATTAGAAGT ACCTACTAAA GGTCAAGTGA TTTTGAAGG	300
	CAATGACTTA ACGGAAAAAG GGACACAAGT AGATAAACTA CGTCAAAAAA TGGGTATGGT	360
40	ATTTCAAAAC TTCAACCTAT TTCCACATAA AAAAGTTGTC GATAATATTA TTTTAGCTCC	420
	TAAATTATTA AAGAAAGATA ATAACGATGA ATTACATAAG GAAGCATTGT CGTTATTAGA	480
	TAAAGTGGGA TTAAAAGAAA AAGCAGATGT ATATCCGAAT CAATTATCAG GTGGTCAAAA	540
45	ACAAAGGGTA GCAATTGCAA GAGCTTTAGC AATGCATCCA GATGTTATTT TATTGATGA	600
	ACCAACTTCA GCATTAGATC CTGAGGTAGT TGGTGATGTA TTAAGAGTAA TGAAAGACCT	660
	AGCCAAAGAA GGTATGACCA TGGTGGTTGT GACACATGAA ATGGGATTG CCAAAGATGT	720
50	AAGTGACAAA GTCATATTTA TGGCAGATGG CGTTGTCGTA GAGTCAGGCA CnCCAGTCGA	780
	AATATTTGAA CAACCGCAAC ATGAAAGAAC ACAAATTTT TTAGCAAGAG TATTATAACA	840
55	ACCTAACGAG GCTTGAATAT ATGATACGCA CCACAAAGTT ATATCATATA TTCAAGCTTT	900

(2) INFORMATION FOR SEQ ID NO: 740:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 435 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 740:

AGTAAATGCG ATGTTGCATG GAGGCTATAG CAATGAGCAA TAAAGCTTGG GCGGCTAGAT	60
TTGAAGTACA ACCTGAAGAG TGGGTTGACG ACTTTAACGC ATCCATTACT TTTGATCAAA	120
CGCTCATAGA TCAAGATATC GAAGGCAGCA TTGCACATGC AACTATGCTT GCGAATCAAG	180
GCATTATTAG TCAACAAGAC AGCGAACAAA TTATACAAGG ACTAAAATCT ATTCAACATG	240
ATTATCATCA AGATCAAATT CAATTAGTG CATCATTAGA AGATATTCAT TTAAATATTG	300
AACATGgAAT TAATTAAACG TATCGGTGgA TGCTGGTGGT AAGTTGCATA CTGGACGCgT	360
AGtAAACGAT CAAGTTGcAA CAGACATGCA CTTGTACACT GAAGAAACAA GTGCAAGnnn	420
TCATCGCATT GGATG	435

(2) INFORMATION FOR SEQ ID NO: 741:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1198 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 741:

AATATCATAA CCAAGGCTTG TCATTACTTA TATGTAAAGA TTAGAGGCTA ATTACATAAT	60
CCTAACTTAT TTAACAGGAA GTCATGAAAA CTATATTACA ACTAAAAGTA TAACTTTCCA	120
TCACCAAAGT CAGAATTTAT TGAAACACTC AACTGATAAT ATAGAAGGCT AATTATAAAA	180
ATACCTGGCG ATTAATAAAC TGTTCGCTT TTTAGCACT TAATATATTT AAAAAGACAA	240
ATAGAGCCCT TTCAGGCTCT ATTTnCTGTA TCCTTAACAA CAGAAGCTGT TAAACTACC	300
CGTCTTTTCa CAaCCAAaGc TaCAAAAaaG aTgGCTAGTT ATTCTTTCGT CACCCGCTGA	360
ATCATTAGTG TTGTTATTTT CTTTAACTTG CACGTCTAAA TCAAGAACTT TTTCCAAaGA	420
TaAAAACCCCC TATTTAAAAG TTGAAGTTAA GACCCcTTCA ATTGTCATAT TAATCATTAC	480
CACACAATAA ATCAATGAAT TTAATAATAA TTATTGTGTA TTAATTGTA AATCGTCATT	540

TGAATATTTT TTGTTTAACT CTTAAATTC GGGTTTAACT TCCTCTATTT CTAACAGTTA 660
 TACTCCAGGA TTAGTTTCCTT TAGAATCCGT ACCGATTAAT TTAACAGTAT GGTTTTGCCA 720
 5 GTCAACTTCA TAAGTAGATG TAAACGTTAC TGTATTTTGA TnTTTGTAGT TATTTCCAAC 780
 CCAGTGTAGT CGATTCCATT GATTAGTATA TCTATCCATT TCTCTTGGT AAGTTACTTT 840
 10 GATTTTAGAT TtTTTTGTAT CATTTTGTTC ATGAGAAAGT ACGCTTATAA ATTCTGGGTT 900
 AAAGTTACCA CGCGCCAATA AAGGCATTTG ATGTGTTGGC AAGAAATTTT GACCAGCATT 960
 TGAACTACTT TGTCTACCAC CTAAAAACAG TTCATTACCA TATGTTGGGT CATAACTATC 1020
 15 TCTACCATAT GGTCCCCAAC CATTATTCAT AATTTTGTGC GCCTCAACAC CCCAGCCAAT 1080
 TGATTTATGA TTTGTTTTTC TATCAATCGT AGTTCTGTAA CTTTCTTGTT TATAATTTAT 1140
 CGTTTCTGAA AATGATTTTG ATCCATTTAA TCCACCTGAT AAGCCATTAG ATATATTA 1198

(2) INFORMATION FOR SEQ ID NO: 742:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 818 base pairs
 (B) TYPE: nucleic acid
 25 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 742:

30 GTGGCATATn CAACTACTA CTGAAAGATC AATTACATAC GTACAGATTT TGCAAAATGA 60
 TCAAGATTAT CCAACAATTT TTAGATGAGa CAAAACGTAA ATCTGTAATT AATTcAGATG 120
 35 TTAATGTAAC GGTAAGATG AGAATAATGA CTTTATcAAC GTGCGAAGAT GCATATAGTG 180
 AAACGACGAA AAGAATTGtT GTTGTGCGAA AAATAATTAA GGTAAGTTAA ACAGAAAmGA 240
 GGATAATTAT GAAATTTATG GCAGAAAATA GGCTGACGTT AACaAAAGGA ACAGCAAAAG 300
 40 ATATTATAGA ACGATTTTAC ACGAGACATG GGATTGAAAC ATTAGAAGGC TTTGATGGCA 360
 TGTTTGTTAC ACAAACTTTA GAACAAGAAG ATTTTGATGA AGTGAAAATT TTAACAGTTT 420
 GGAAATCAAA GCAAGCTTTT ACGGATTGGT TAAAATCTGA TGTCTTTAAA GCAGCGCATA 480
 45 AACATGTTAG AAGTAAAAAT GAAGATGAAA GTAGCCCGAT TATAAATAAC AAAGTAATTA 540
 CATATGATAT AGGCTATAGT TACATGAAAT AATTGAATTT AAAGAGGTTG CAGTACTTGT 600
 50 TATGACAATT GGTATTGTTA GCTTTTGTAA CGACCATACA TGATACCGAT GATGGTCGTT 660
 TTTTAAATGa ACACAAACAT GCTAACAACA AATTGCTAAA ACATAGTTTG aTTTGAATGT 720
 GgCTTTGGAA AATAATCATC CAtTATATCa TTtTGGATTn TATTTTGGAA GAAGAAAAGA 780

(2) INFORMATION FOR SEQ ID NO: 743:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1209 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 743:

5	TGCTGGTAAA TCTTCCCTTA TCAAGTCTTT AATTGGTGAA TTTAATGCTA CCGGTACTAA	60
15	ATTGTTATAT AACAAACCTA TACAACAACA ACTGCAACAT ATTACATATA TTCCACAAAA	120
	AGCACATATT GATTTAGATT TTCCTATAAG TGTGGAACAA GTGATTTTAT CAGGTTGCTA	180
	CAAAGAAATT GGATGGTTTA GACGACCTAA TAAATCAGCA AGGGATAAAC TCAAACAGTT	240
20	ATTAAGCGAT TTAGAATTAG AATCTTTACG TCATCGACAA ATTTCAGAAT TAAGTGGTGG	300
	ACAATTACAA CGTGTGCTAG TAGCAAGAGC ATTGATGTCC GAAAGTGAAG TTTATTTTCT	360
25	AGATGAGCCG TTTGTCGGAA TTGATTTTAT TAGCGAAAAA tTAATCATGA CAAAAAtcGA	420
	GAACTTAAaA CAACAAGGAA AACTTATTcT TATCATCCAC CATGATCTAT CAAAAGCAAA	480
	GCAATACTTT GATCGCATTa TTCTATTAAA TCAAACATTA CGATACTTTG GTGATAGTGA	540
30	AGAGGCTATG AGTGTCACTC GCTTAAACGA AACATTTATG AGTAGCACTG ACTGTAGTGA	600
	CCCTAGTCAA AGGAGCAATA TAACATGTTA GAGTTTGTCT AACATTTATT TACATATCAA	660
	TTCTTGAATC GAGCATTGAT AACTTCAATT ATTGTAGGGA TAGTTTGTGG TACAGTTGGT	720
35	AGTTTAATTG TATTACGTGG TCTTTTATTA ATGGGAGATG CAATGAGTCA CGCAGTATTA	780
	CCTGGTGTGG CCCTATCATT CTTATTTGGT ATTCCAATGT TTGTAGGCGC ACTTATAACT	840
	GGTATGATCG CAAGTATTTT TATCGGTTAT ATCACAATCTA GTAGTAAAAC GAAACCTGAC	900
40	GCCGCTATTG GAATTAGTTT TACCGCTTTC TTAGCTTCGG GGATTATTAT TATTAGCTTA	960
	ATAAACACTA CGACAGATTT GTACCATATT CTGTTTGGTA ATTTACTGGC AATCACAAAT	1020
45	AGTGCATTTT TAACAACATAT TGTGATTGGT TCAATCGTCC TTATTCTAAT CATTATTTTC	1080
	TATCGTCCAT TAATGATTTT TACATTGAT CCAACGTTTA GTAGAATGAG TGGTCTAAAT	1140
	ACGACGTTAT TACATTACTT TGTGATGTTG tTACTCTCAT TAGnAACAGT AGCAAGTAtT	1200
50	CmAACGGTA	1209

(2) INFORMATION FOR SEQ ID NO: 744:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 675 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 744:

5	CCGCCTTTCG TAAACCTAAT ATAATACGAA ATTTTCGTAT TGTCACATT AAATACGTTT	60
10	TTTTCGTAAA AAACCTTACT ATGATATGAA AATTTTCGTAT AATAAGAAAA AAGGAGGTAA	120
	GTAATATGAA CAAAGAmAGm AATATTATTA TAGCCAAAAm CATTAGAAAA TTTCTCAACG	180
	ATTCAAATAT GTCTCAAAAG AAACCTTGCTG AaCTCATTA CATAAAACCA TCTACTTTAA	240
15	GCGATTATTT AAATTTACGT TCCAACCCCT CTCACGGCGT TATACAAAGG ATAGCTGATG	300
	TTTTTCGAGGT TGGTAAAAGC GACATAGATA CTACATACAA AGACGATAAC GACATCACTT	360
20	CCATATACAA CAAACTCACA CCTCCCCGCC AAGAAAACGT ACTTAACTAT GCAAATGAAC	420
	AATTGGAAGA ACAGAATTCT AAAGGAGATA ACGTTGTAGA TATTAATTCA TATAAACAGG	480
	AGAAAACCTCC AGTTAACGTC AATGGTTGCG TCTCTGCTGG TGTAGGAGAA CGTTTACACG	540
25	ATGAAACGCT ATTTACTGAA ATGGTTAAAG GACCTATCCC CACACACGAT TTAGCGTTAA	600
	AAGTAAATGG TGATTCTATG GrACCTATGT TTAAAGATGG CGAAATCATA TTTGTGGAGA	660
	AAACTCACAA TnTGA	675

(2) INFORMATION FOR SEQ ID NO: 745:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 924 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 745:

40	CAGGTGTCAT AGTTGAACTT GGtGGTTTTG GACTAATCGT TAAATCATCA ATTTGTGTCA	60
	TCCAAGGTTG GAATTTACTG CCTTGTGTCT CCAGTGCCTT GAAAATACCT TTATCTTGAA	120
45	ATAAGTCAAC TAACTCTTGG ATACCTTTAA TTAATGCTGG GTTACCACCA GAAATTGTAA	180
	CGTGGTTAAA TAAATCGCCA CCAATTCGTT TTAATTCATC ATAAATTTCT TCAGCGGTCA	240
	TGAGTTTTAT ATCGCCTTTA GCACTACCAT CCCAAGTAAA TGCAGAATCA CACCAGCTAC	300
50	AGgATaATCA CATCCAGCTG TTCTCACAAA CATCGTTTTT CTACCGATTA CTCGACCTTC	360
	ACCCTGAATG GTTGGACCGA ATATTTTCGAG TACAGGAATT TTAGCCATTA GTTACACCTG	420
55	TTCCTTTGGT CTAAATACGA CATAACTTGT TGGTGTCTCT CTTACAAATA CTTGAATACA	480

EP 0 786 519 A2

TACGATTTCA GTTGAAGGGA TTTTGTITTT AAAAGCAGGT AAGTTATTTA ACAGTTGATG 600
 GTCAAATTTA CCGTGTATCA TCTTTTTC AA ATGGCTAAAG TTCACTAAGA AGCCAGTGTC 660
 5 ATCTAGTTTA TCACCGACAA TTGTAAaya CAAAGTAAGT ATGACCATGG ACATTTTGAC 720
 AAATACCTGC TTCTTCACAT GGAATGTGAT GTGCAGCCGA AAAATTAAAA TCTTTATTTA 780
 10 ATTCGAATTG ATATGGATGC GTTGTACTAG GATAGATTG TTGTAACATT TTAAAGCGCT 840
 CCTTTACTTT CAAGATATTG ATTTAGTCCA CGTTGACGTA AATGACAAGC TGGACATTCA 900
 CCACAGCCAT CCCCAATGAT ACCG 924

(2) INFORMATION FOR SEQ ID NO: 746:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 971 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 746:

ATCTTTTGGG TATTTTCTAT ATTAGCTGTT GTTTTCTTAG TATTATTTAG TTTTGCTGTT 60
 GGTGCATCAA ATGTACCAAT GATGATTTTA ACATTTATAT TACTCGTTGC AACCTTTGGA 120
 30 ATTGGATTTA CTACAAAGAA AAAATATCGA GAAAACGATT GGCTATAAGT TATATCGACA 180
 ATAACACGCG TTGATTTAAG ACCACACATG TTCATGATGA ACATTTAACT GGTTTTATAT 240
 TGGCGCGTGT TTTTATTATT TAAGGTATAA AAGCGTAATA TGTTACCTAA TTGTTAGGAC 300
 35 TACATATTAC GCTTTTGGTA ATTATTTTGA TTTTCTTTTA AATCGTTGTT CATGTAATTG 360
 TATTAACGCA TCATGGTGGG GCTCTAAaTA ATCATtGCTA ATTcTTGATG GAGACCmCGA 420
 TTtCCAATA rGATkGAATT kGGACCmCTA ATkGTTAATG GTcctCCTAG TAAATTGGAA 480
 40 GCTTGTC CAT TaCTTCcATA TAAAtAACCA ATCCGCCAGC AAAtCCCcAT GGtKGAAGTC 540
 TTGGCGTCAT ATATGCTTCT AAaTTACCTG TAGCAACTGA AACGATTTCa AGCGCTGCAC 600
 TACCATATGC CCTTGCACTT CTAGAATCAT TAACAATTTTc TTAAAGATT TCTCCTAAAA 660
 45 TTGGTTTAGT TAACCAGTTC GGATTGATCC CAATAATGCT TTGTCTTAGA TTAGAATCAT 720
 TCAATGGTTT CAAGGGTTGG CTACCAGCAT ATGCACCTTC CCCTACTTTA GCATGATATA 780
 50 AGACATCAGC CATAACATCA TATACAAAAC CTGCATAAGG TTTACCATCG ATATAAATAC 840
 CAATTGAAAT TGCAGAAATTT TCTTGTGAT GAACAAAATT CAATGTACCG TCTATTGGGT 900
 CAACAATCCA TACCGTACCT TTGGAAGTAT CGATGTCATG ACCATGCCCT TCTTCACCTA 960

(2) INFORMATION FOR SEQ ID NO: 747:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 865 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 747:

```

TTCTCGTCAC TGTACGTTGT ATTGCGGCAT CATCCATTAT GATACGTTCA GACATATTCT      60
CACCCCTTTCA AAATTTAGAA ACAAAAAACC TCATGTCCTT AATATCGACA TGAGGTTTAG      120
TATATACAAT CAGCCTATTT ACATAGAAGA ATCGTAGTAT TACTACTTAT TCTTGCATAT      180
GTGAAAGTGT TATGATCATT TTAGTATATA TCTATATTTT CATGTCCTTG ACGTCTCTCT      240
GGACGCTCAA TTAAAGACTC TTTATGTTGT ACTTAAACTG TTATAAGGAT AATACTAATC      300
AGGCGCTTTG TCAATCTATA TTGAAAAATT AACCATACTC AGTAAAAATG TTAACCTTAA      360
TCTATTTTAT AATGTGTTTT CATTTAAAAA AAACGAAAAC GATAAACACT TATAGTTTAC      420
ATAATAATGT TATCGTAATT ATAGCAGGAC ACAATTATGC ATCTCTTTTT CGAATTGTAT      480
CTAATAAATC TTCAAAGTCT TGTGGTAATT CAGCATGTCT TTCAATATAT TCACCTGTTA      540
CTGGATGTTT GAATCCAATA AGTCCAGCAT GTAGAGCTTG ACCACCAATA TCCAATGTCT      600
TTTTCGGTCC ATACTTTGGA TCACCAACTA ATGGGAAGCC AATATATTTT ATGTGAACAC      660
GGATTGATG CGTACGTCCT GTTTCAAGTT GACATTCAAC AAGCGTATAA TCTTTAAAT      720
GTTCTAGTAC GTTAAATGT GTCACGCTT CCTTACCATC ATCAnCAACA GCCATAGATT      780
GACGATCATT TTTGTTTCTA CCAATTGGCG CATCGATTGT ACCGTAATCA TGAGGAATAT      840
TCCCGTGGAA CTAAAnCGAT ATAGT      865

```

(2) INFORMATION FOR SEQ ID NO: 748:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 818 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 748:

```

ATAACATTGT GGAGCCTATG ACATTGATTT ATGTCTCGGT CTCAAATGTT CTTGTAAAAA      60
AACTAAGTAT AGTTGAATTT TAAGTTAAAA AAATTGTTTT TGCAAAAATA AAATAATCCA      120

```

	TTTTAGG TTCGCCTCTA AAAATCCTTG CGaTATTAGA GCGATGTCTA ATTATCAATA	240
	TGATTGAAAC TAAGAAACTA ACGACTAATA AAATATAGTC TTGAATGATA AGCGAGCCAA	300
5	TCACACAGCA AATTGCTGCA ACGATACTTG CTAAAGAAAC ATATTAAAA ATCTTCAATA	360
	CAATAAAGAA GATAATTGCA AGTATTAGTA AAAGTATCGG ATTGACTCCC AAGACGACAC	420
	CTGCACTAGT TGCAACAGCT TTGCCACCTT GGAATTTTAA ATAAACAGGA TAAACGTGTC	480
10	CAAGTATAGC GAATAAGCCA ACAATTAAAC CATTTGTAAA AAAAGTACTA ATAGGGCCAT	540
	CTGCGTGAAC TTGTAACCAT AAAGGGAAGA AAACAGTTAT GAACCCCTTG AAAATATCTA	600
15	GAAATGTTAC CAAGAATCCT GCAGGACGAC CTAATACTCT AAAGCTATTA GTAGCGCCAG	660
	TATTACCACT ACCAAATTGT CTAATATCTT TTTTGAAAA TAATTTTCCA ATTACGAATC	720
	CACCTGGGAA AGCGCCGATA AGATAACTTA GTAGTAACAT GACGATTATC ATCATAAATA	780
20	TTACACATCC TTTAATATCT TAGGACTATT TTATCATA	818

(2) INFORMATION FOR SEQ ID NO: 749:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 971 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 749:

	ATATCCAATa ACTGTTTCATT GTCTTGATAT TCCTTAAATG TTTCATAATG CTCATTAGAA	60
35	ATGACAATTT CAAGCAACCA ACCCGTGCCA CTTTCCTCTT TATTAATTAT TACGCCATCT	120
	TCTAATTCAT ATTCTATAAT TCTGCCGTGT TCATTCACAA TTTGAAACCT TACTGCTTTA	180
	AAAGTTTTCA TATTCCCACA TCCCATAGT TTAATATTTA TGATTTTTGA ATTATTTAGA	240
40	AGATTTAAGG TCATTTTCATG ACTAATTTCT TTAATATAA CAAATAACGA GATGCTATAG	300
	CTATTAATTA TATAAAATTT GcCATTTTGg CCATTTTTAA GCTAGTAATT AAGATATAGG	360
	cATAGGAGGT GAATCACaCA CTACATGCTA AATAAAATCG TAATTGTCGG GAGcTGACGA	420
45	AAGACGCACA AATATTTGAA AAGGAGGATA GAAAAATTGC AACGTTTTGT GTTGCAACGC	480
	ACCGAAATTA TAAAGATGAA AATGGAGAAA TCGTCTGTGA TTACTTATTC TGTAAGCAT	540
	TTGGCAAGTT AGCTTCTAAT ATAGAAAAAT ATACTAATCA AGGTACATTG GTTGGTATAA	600
50	CTGGTCAAAT GAGATCAAGA AAGTATGATA AAGACGGACA AACACACTTT GTCACTGAAT	660
	TATATGTTGA AACAATAAAA TTTATGTCCC CTAAATCCCA AAATAATGAA ATTCTCTCAG	720

TCCAATTATC CTAAACATCC TTAATATACA TTTAATCCAT CCTAAATTTT TTATAGATCT 840
 AATTAACCTG AAATATACTC ACTTAAAAAC GACTTACATG ACCTAGTACT GTTGGTAAGG 900
 5 TCGnCTTTTG GTGTAGTTTT CCTAATAGAn AATAGACnTA GGTGCCCCAA CCGATTACAT 960
 AAAAAATTGC C 971

(2) INFORMATION FOR SEQ ID NO: 750:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 832 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 750:

20 ATAGATTACT CTTTGTATCT GTAGATCCTA CTGTAACGAC ATTGTCCATA GATGCAGGAA 60
 CATCTTTCAC TTCGCCATTA CCTTGATATT CACGCTGTAA TTTTAGTTTC TGTGTGTCAT 120
 TGACATCAAT ACCATCATT A CCAGCTGCAG CAACAACGAT AGATTTTTC TTCTGGCGT 180
 25 AATTGATTGC TTTCTGTAAC GCATCGTATT CTACTTTTC ATCTTTTCTA AATGTTTGAT 240
 GGTCATTTTT GTCCAAAATA ATATAACTAC CAACACTAAT ATTAATGACT TGaTTTCCAT 300
 CATTTCAGC TTGAACAATC GCTTTTGATA CCCAAAGCAG TTCTGTTTTT TTACTIONACAA 360
 30 ACACGCGATA CATTGTAAAT TTGTTATTTC GTGCAACACC TATTAACCTA CCATTAGCAC 420
 TCGTTTGACC CGACACCATC GTGCCATGTC CTTTCCTATC ATTGACATCG TGAACATCAC 480
 35 CTGTTTCCTC CGGTTAGTA CCTCTAAAAC CGTTTAAAGG TACTAAATTT TTAGAATCAG 540
 TCGAGAAATT ATTTTCAAA TCGTCATGGT TTTTCATCAC ACCTGTATCT ATGATTGCTA 600
 TTTTGGTGTT AGCATGTTTT GGCAAATCAT CATACGATGC ACCATTATTG GTTATTTTAT 660
 40 TCATATCCCA TTGTCTTGAA AATAATGACT CATTGTATGT TCTGTCTATT GTTTTCTCGC 720
 TAGTAATACA AGTTGAACAT GTGGCATTGA TATATTTAA ATCATTTTTA TAGTTTGCTA 780
 AAGCATTAGC ATGCATTTTC GTCATTTTAA TCTGTGCCAC ATGGAATTCC GG 832

(2) INFORMATION FOR SEQ ID NO: 751:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 475 base pairs
 (B) TYPE: nucleic acid
 50 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

	GTAATATCAA TCTCTTCATA AGCTGAATTA TTTTCATGCA CTTCTTGATG TGATGATTTG	60
	TCACGAACCG CTACAACTAA CATTTTATCG TCTAAAATAA GTTGTTTATA TTTTCTAAT	120
5	TCATCAGGCG CTAAGTTGTA GCGTGATAAA ACTGCATGTT CACCATCTTC TCCTGTTAAC	180
	AGTTTAGTCA TTCTATCACT AAATGTTCCA CTTGTTGAGA TAAGGGAGAT TTCAGAGTCG	240
	TGTAAGTCAT TTAGGTGTAA TTTACTTTTA CTAATAATTG TTAGCTCTGA TTCTAAATAA	300
10	CCTTCAGATT TCTTTTGATT GATTACGTTG TATAATTCGC CAGTGTCAAT TACTACAGTA	360
	ATATCTGCCA TAGTTGTCGC CCCTTTAAAA ATTTGTTTAT tTAATCTTTT ACCCTTCTTA	420
15	TnATAAAGTA AAACCCCTTAC ATTATTAAGT nATAAGCTT CATTTCGCATT AAACG	475

(2) INFORMATION FOR SEQ ID NO: 752:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1019 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 752:

	GCGACACTTG TGAGTTCTCC AGCAGCAAAC GCGTTATCTT CAAAGGCTAT GGACAATCAT	60
	CCACAACAAA CGCAGTCAAG CAAACAGCAA ACACCTAAGA TTCAAAAAGG CGGTAACCTT	120
30	AAACCATTAG AACAACTGA ACACGCAAAT GTTATATTAC CAAATAACGA TCGTCACCAA	180
	ATCACAGATA CAACGAATGG TyATTATGCA CCCGTAACCT ATATTCAAGT TGAAGCACCT	240
35	ACTGGTACAT TTATTGCTTC CCGTGTAGTT GTAGGTAAAG ATACTCTTTT AACAAATAAA	300
	CACGTCGTAG ATGCTACGCA CCGTGATCCT CATGCTTTAA AAGCATTCCTC TTCTGCAATT	360
	AACCAAGACA ATTATCCAAA TGGTGGTTTC ACTGCTGAAC AAATCACTAA ATATTCAGGC	420
40	GAAGGTGATT TAGCAATAGT TAAATTCTCC CCTAATGAGC AAAACAAACA TATTGGTGAA	480
	GTAGTTAAAC CAGCAACAAT GAGTAATAAT GCTGAAACAC AAGTTAACCA AAATATTACT	540
	GTAACAGGAT ATCCTGGTGA TAAACCTGTA GCAACAATGT GGGAAAGTAA AGGAAAAATC	600
45	ACTTACCTCA AAGGCGAACT ATGCAATATG ATTTAAGTAC AACTGGTGGT AATTTCAGGT	660
	CACCTGTATT TAATGAAAAA AATGAAGTGA TCGGaATTCA TTGGGGCGGT GTACCAAATG	720
	AATTTaATGG TGCGGTATTT ATTAATGAAA ATGTACGCAA CTtCTTAAAA CAAAATATTG	780
50	AAGATATCCA TTTTGCCAAC GATGACCAAC CTAATAACCC AGATAATCCT GATAACCCTA	840
	ACAATCCTGA TAACCCTAAC AACCCAGATG AACCAAATAA CCCnGACAAC CCTAACCAACC	900

CAATTAAGTT CGTCTAGATA AAATAGGAAG CAAAGTCTTA GCAACGTAAA ATATTTTGA

1019

(2) INFORMATION FOR SEQ ID NO: 753:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 533 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 753:

ATTCTTATCC CAGGTAGGTG nTTTACTTCT TATATTAGGT GCAATAACTC ATGCCACTCA 60
TCTTGTGGCA CAACATGAaT CGCATTtTTCA AAAATTGCAT GTCCTGCTTG ATCAGTCAAA 120
CCGGCAGCAT GATCAAAATG CATATGTGTC ATTAGCACAT AATCAATATC CTTTGGCGTT 180
AAATTATAAT TTGCCAAATC AGCAATTATA TGACTTTCTT CATCTACTCC AAAATTACGT 240
AATTGCTTTT CAGATAATTT ACCATTACCA ATACCTGCAT CTATAATCAA ATTATATTGA 300
GCCGTTTGAA TCAAAATTGG ATGTGTCGGT AAATTGATTT GATTTCGTTT ATTGTCATTG 360
TATTGCTTTG ACCACAACGG CTTCGGAACA ACACCAAACA TTGCACCGCC ATCCATTTTT 420
GTATTGCCAC CATTtagaTA ATGAATAGaT ATATCCCCGA TTTTCATAAC ATCACCTATT 480
CTTTCGTAT TCGTTATTAC AATTAGCATG TGTTTATTAC ATCATATCAC TAT 533

(2) INFORMATION FOR SEQ ID NO: 754:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 1225 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 754:

ATCCCCTGCA AGTGATAAAA TTATTGAAAA AGGCGACATG ATTACATTAG ATTTTGGCGC 60
GTATTATAAC GGCTATTGTT CAGATATTAC TAGAACATTT GCTATTGGAG AACCAGATCC 120
TAAACTGAAA GAnATATATC AnATAGTACT TGAATCTCAA ATGAAAGCAA TTAATGAGAt 180
TAGACCTGGC ATGACTGGTG CAGAAGCTGA TGCCATTtTCA AGAACTATt TAGAGTCAAA 240
AGGGTATGGA AAAGAATTtG GACATTCACT AGGACATGGT ATTGGTTTtAG AAATCCATGA 300
AGGGCCAATG CTGGCTCGTA CGATACaAGA TAAACTTCaA GTTAACAACT GTGTTACAGT 360
AGAACCTGGT GTTTATATAG AAGGTTTGGG CCGTATAAGA ATAGAAGATG ATATTTtAAT 420

AGCGTGTAAG ATGAGGAGGA AACTGAATGA TTTCGGTTAA TGATTTTAAA ACAGGTTTAA 540
 CAATTTCTGT TGATAACGCT ATTTGGAAAG TTATAGACTT CCAACATGTA AAGCCTGGTA 600
 5 AAGGTTTCAGC ATTCGTTTCGT TCAAAATTAC GTAATTTAAG AACTGGTGCA ATTCAAGAGA 660
 AAACGTTTATG AGCTGGTGAA AAAGTTGAAC CAGCAATGAT TGAAAATCGT cGCATGCAAT 720
 ATTTATATGC TGACGGAGAT AATCATGTAT TTATGGATAA TGAAAGCTTT GAACAAACAG 780
 10 AACTTTCAAG TGATTACTTA AAAGAAGAAT TGAATTACTT AAAAGAAGGT ATGGAAGTAC 840
 AAATTCAAAC ATACGAAGGT GaAACTATCG GTGTTGAATT ACCTAAACT GTTGAATTAA 900
 15 CAGTAACTGA AACAGAACCT GGTATTAAAG GTGATACTGC AACTGGTGCC ACTaAATCGG 960
 CAACTGTTGA AACTGGTTAT ACATTAAATG TACCTTTTATT TGTAACGAA GGTGACGTTT 1020
 TAATTATCAA CACTGGTGAT GGAAGCTACA TTTCAAGAGG ATAATCTCTA ATTTGTTAAC 1080
 20 AAATAGCTTG TATTCATAT ACTGATTTAA CGTAAGATAT TCTAAATAAG TCTCATAAAG 1140
 CTATTGCCTA AAATGATTAT AGGTTATATG CTGATATGAG GCTTTTTTATT TTTAAAATAA 1200
 TTTTTTAAAT ATAAAACGAA TCGTC 1225

25 (2) INFORMATION FOR SEQ ID NO: 755:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 1265 base pairs
 (B) TYPE: nucleic acid
 30 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 755:

35 ACAAACAAAT CACTTAGTTA AAATTGACAG TGCATTATAT TCCGATAAAT TATTCAACAT 60
 TGTAGAAAnn AGAATTGATA CACCAGATAT TGGCTATAAT ACAGTGGTTT TATCAGAAAA 120
 40 ATGAGTGTAG AAATTAAAGG GATACCTGAn GTGTTGAATA AATTAGAATC GGTATACGGT 180
 AAACAAGCAA TGCAGGCTAA GAGTGATAAA GCTTTAAATG AAGCATCTGA ATTTTTTATA 240
 AAGGCTTTAA AGAAAGAGTT CGAGAGCTTT AAAGATACGG GTGCCAGTAT AGAAGAAATG 300
 45 ACTAAATCTA AGCCTTATAC AAAAGTTGGT AGTCAAGAAA GGGCTGTTTT AATTGAATGG 360
 GTAGGTCTTA TGAATCGCAA AAACATTATT CACTTGAATG AACATGGTTA TACAAGAGAT 420
 GGAAAAAAT ATACACCAAG AGGTTTTGGA GTTATTGCAA AAACATTAGC TGCTAGCGAA 480
 50 CGTAAGTATA GAGAAATTAT AAAAAAGGAG TTGGCCAGAT AAATGAATAT ATTAAACACC 540
 ATAAAAGGAA TTTTATTATC TGATGCAGAG CTCAAAACAC ATATAAATTC TAGAATATAC 600

55

	TATGATTGTC CTTCAGACTT TATGTCTGAT AAATATCTCA GTGAAGAATA CTTAATTCAA	720
	ATAGATGTAG AATCTTCAAA TAATCAGAAA ACAATTGATA TAACAAAACG AATAAGATAC	780
5	CTGTTATATC AACAAAATTT AATTCAAGCA TCTAGTCAGT TAGATGCTTA TTTGAAGAA	840
	ACTAAACGTT ATGTGATGTC GAGACGATAT CAAGGCATAC CCAAAAATAT ATATTATAAA	900
10	AATCAGCGCA TCGAATAGGT GTGCTTTTTA ATTTTTAAGG AGGAAATAAG CAATGGCAGA	960
	AGGACAAGGT TCTTATAAAG TAGGTTTTAA AAGATTATAC GTTGGAGTTT TTAACCCAGA	1020
	AGCAACAAAA GTAGTTAAAC GCATGACATG GGAAGATGAA AAAGGTGGTA CAGTTGACCT	1080
15	AAATATCACA GGTTTAGCAC CAGATTTAGT AGATATGTTT GCATCTAACA AACGTGTATG	1140
	GATGaAAAA CAAGGTACTA ATGAAaGTTA AGTCcTGaCa TGaGTaTTTT CaATATTCCa	1200
	AGTGaTGaTT TAAaCACaGT TaTTGGaCGT ACTAAAGATA AAAATGGGTA CATCTTGGGT	1260
20	AGGAG	1265

(2) INFORMATION FOR SEQ ID NO: 756:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1111 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 756:

	CATATACCCG GGTTCCAAGA ATCCTCTATC CATATGGTCC CCCAATTTTG ATTCCACCAT	60
35	ATTGTTAAAT ATCACTTTCC CAGCCTACTT TTTTATnCAG TTGGGCTCTC TAAAATTGTT	120
	TTGAAATCCA GGTTGAACAT ATTTCCAGTG TATGACCAAT CGAAACATTT GCACCAATAA	180
	GGCCGCCAAT TTTTCCTGTA TCATCACCAG TAACATTACC GTTGAATCCA TAAGTTAAAG	240
40	TACTCATATA CTCTTTTGTA TCAATCGAAT TTCTTGATA GTAATCAGAT ATTTGAGCTA	300
	CTTCATTATC AGGTAGTTGC AACTGTACCT TAAAGGCTGA AGGCCAGGCT AAACCACTTT	360
	TGTTAGCACC TTCTTCGCTA TAACTCTAT ATTGACCAGC AATGGTACCT TTCGTTCTAA	420
45	TAAC TAGCAG TTTTATTATA TGATTTTAT CATCGATAAA ACTATAAAAT ACTTTTTTGT	480
	GCA TGCCATT TTCTTTATCA TAAGTGACTA AATCACCTGT TTTTACTGTA GTATTGCTTC	540
	CAATATCTGT AGTACCGGTT TTAATATTAA TATCAGAATC TGCGGCATTA GCGACAGGAT	600
50	TCATTAATAT GGAACCTAGC AATAGTGTG TTGTTACTGA GCTGACTATA CGTGTTTTCA	660
	TTTTCATCAT CCTTCTATTT TTTAAAACGA TTTGAGGAAA CAATAATCAA TATGTCAATT	720

GTAGCAACTG ATAAATTACT GAGTGATGAT GAGTGATTAT TTTAAGAATA TGTTTTTAAC 840
 TTTTATTTAA AATTTGAAAG GAAGCATTTC AATTTGAGG GTTAGTCAAA GTTGAATAAA 900
 5 TTCTTTATGA AACAAAGGAAA AGACATAGCT AATTTtATTG ATTAATTTCT TTAAACTAA 960
 TGATTTGTTT GATTTAAAAA TGTAATCGAT TACAATATAA AAATACAAAT ATCTTAGAAT 1020
 TAAATCAATT AATTAATAT TAAATAAAAA TTAATATAT ATTAAGTAGT GTAAATTAAT 1080
 10 AAATAGAAAT AGAGAAAAAG GGTATTAATT A 1111

(2) INFORMATION FOR SEQ ID NO: 757:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 466 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 757:

TATCTATTGT ATGTAACAAT AGGTACATAA TATTTTtagG GTGGGTtATA TGAGCATAAT 60
 25 TACAAGATTG TTTAATAACA GTGATTTTGA AAAATTAAAT CAACTATGTA AATTATATGA 120
 TGATCTAGGT TATCCAACAA ATGAGAATGA TTTAAAAAAG AGACTAAAGA AAATAACGAA 180
 TCATGATGAT TACTTCCTAC TGCTTTTGAT AAAAGAAAAT AAAATAATTG GTTTAAGTGG 240
 30 TATGTGTAAA ATGATGTTTT ACGAAWAAA TGCAGAGTAT ATGAGAATCC TTGCGTTTGT 300
 TATACATTCT GAATTTAGGA AAAAGGTTA TGGAAAGAGA TTATTAGCTG ATTCTGAAGA 360
 ATTTTCTAAA CGGTTGAATT GTAAAGcMAT AaCACTAAAT AGTGGAATA GAGATGanAG 420
 35 ACATCTGCAC ATAAACTATA TAGTGATant GGTATGTtA GCAATA 466

(2) INFORMATION FOR SEQ ID NO: 758:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 402 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 758:

CGTACAGCAT AACCAAATAC ATATCTGCCA AAATCGCCAT ATGCCCCAGT TCCTCTTCCA 60
 50 TATTCGGTTG TCATTGAGTT TTTAATTTTA TCGATAGAAA AATGTAAATG GCTATCTAAT 120
 TTGTTTTTTA AAGATTTTAT GTAATCtCTA TATTAAATT CGAATATTCT TTTTATACC 180

AACTAATATA TwCAATTGTA TGCCTAGCAT AATCTCTCAT TAAAATATGA GGATATACCA 300
 TTTCTTTATC AAATATtTCT TCATAAATAT AATTAGCAAT CTCTATATGT ATTtCACAAA 360
 5 TGTCGATTTCG AAGTGTGCGC CCTAAAACAG rAGCATATAA TC 402

(2) INFORMATION FOR SEQ ID NO: 759:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 759:

AAGTTACTCA ACAGCCATTT GACACGTCTC GATTAGAGCG ATTAGGTATA ACCGAGCGCC 60
 20 AAATAAAGA CATGTATCGT TTATTAGGAC TAGCCAAATA TGAAGATCGA TTTGTTATTC 120
 CAACATCACA CAAAGAAACC TATTTAGATA CGTATCACGC ACAAGGTAGT ACAGGATACA 180
 ATTACGGCGG CGAGCATTTT GGAGATAACT GTGAAGGCTG TGGCGTTGCA GTAGGTTTCA 240
 25 GGAAACTGG TCAAGAAATT TATAATGGAG AATTCTATGG AGGGATTTCC GTGGTTAATT 300
 TCGATAATTT AAAAAATATC CAAGAAAGTT TGGGTnnn 338

(2) INFORMATION FOR SEQ ID NO: 760:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 760:

CTCTATTATA TTTAGAGTTA TAGCTATTGC aGTTGTTTAT TTATTGAAAA TAAATGTACT 60
 40 ATCATTAGtT TTAGCAAGTG TATTAGGCAG TTTgGTATct AGGCTACTAT TATCTATTAT 120
 TTAAATTTA CCTGTGTGGG TAGTGTGTGT AAaCGCGATT CCAGGCGTAA TATTCACTTT 180
 45 AATTGTAGcT ATTCCTTTAT ATCTCACATT GAGAAAAAGA ATGGCAGTAT TACTAAGATA 240
 ATAAATCAAA ACACGGTCGT CACAATTACT GTTGGCGACC GTGTTTTACT AGCTATTTAT 300
 TGTTTTCAGT TTCTTTTGTA TCTAACAATT TCACTTTGTG ATTTTCCCAA TCAATTTTAT 360
 50 ATGTTGaTTT AAATGTTCTA GTTTTAAAGT TTTTATAAT 399

(2) INFORMATION FOR SEQ ID NO: 761:

(A) LENGTH: 639 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 761:

10 GCATATnCAA AACAAATAGCT GCTTTAGGTG CGGGGGCTAT TAGCGTTATT TCTGCACTAA 60
 CAGGAGGTTT AGTTGGCGCA GGTGTTGGTG GTTTCCTTGG ATCTATAGCT GCATCGAATA 120
 TTGATACTAG TAAGGGAATA TATATAAAAT TAAAACTAA AAAGTATGCA GCCGGGGAAT 180
 15 ACGTTCTGAC AGGAGAAAAA TGGGGATATC AGTAAGGGTG ATTTTATGGA TAGATTAAAA 240
 TATTCACCTA AAGTTGGAAT TTTAGCATT TATTATTTT GTACTTTAAA TTATTTAGTT 300
 CCAATGCAAA GCAATGCTTT TTCAATAATT ATATATTCGG CAATTTTTGC TGTGTTACTT 360
 20 ATGCTTTTAG-TTTATATATT-TTTAGGAATT-TTAAAGAAAT GACATGAAAC-AAATTAGCAT 420
 TGGCTATGAA GAAATCTATG GGGATAGAAT TTTTCATAGC CATTTTTTAA AAGAGCATGA 480
 25 AGTAAAAAAT TGGAAAACCG TCAATCAAAT AATTGAAAAA GAACACTTGG ACAAAAATGA 540
 ATATGnAAGC GGAACCGCCG TTATTTTCT TTTGCAGGAT CGTTAGATTA GATTnCGGTT 600
 GTATAGTATA ATGAAAAATA TTATAATAAA TTTATAAAA 639

(2) INFORMATION FOR SEQ ID NO: 762:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 852 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 762:

40 nTGTTTCGTTG TCTGGATCCA ACGTAAACAG TCGCTTCATC TAATACAATG ATAGGCGCAT 60
 CTTTTAATAT CATTCTTGCA ATAGTGA CTC GTTGT TTTTC ACCACCAGAC AATTTATCTC 120
 45 CCACTGTACC AACATTGTA TCATATCCAT CTGGCACTT TTCAATAAAT TCATGACATT 180
 GTGCTAACTT GGcAGCTTTT TCAACTGCCT CATCCGTAGC TTCTGGATTG CCAAGTTTAA 240
 TATTTTCTTT AAAAGTAAGA TTTAATAAAA AGTTATCTTG TCCAACAAAA CCAACTAAAT 300
 50 CGTTAAGTTG TTTCGATTCA ATATCTTTTA TATTTATACC GCCAATCGTA ATTTACCTG 360
 AAGTCACATC CCAGTATCGT GATATAAGCT TGGCAATGGT TGACTTACCG CTACCAGaTG 420
 CCCCAGCGAT AGCTGTGAAA TTATTTTCTG GTACTGTAAA TGATAAATGC TTAAAGACCA 480

55

EP 0 786 519 A2

	GAGGCTTCTT AAATTTTGTT GACAATACTA ACTCTTCTAG ACTTAATATT TGATTCACCTT	600
	CAGTTAATGC GTATTGTATA GACTTTAAAT GATTTACATA ATTAGTAAAA TTCTTAATCG	660
5	GTGCTACTAC ACCTAAAGAT AATACGATGC ATAGGAAAAA TTCCGCATAG TTTAATTGGT	720
	TGATAGATAT CAAATACATG CCGACCGGTA AAATCCCTAA AAATGTTGAA GGTAATACAC	780
10	TAGCTCCTAA ATTCATATAC CCCCATGTAT TTTTAAACCA ATTCAAAGTG TGAATCTTAT	840
	AATTATCTAC TG	852

(2) INFORMATION FOR SEQ ID NO: 763:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 852 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 763:

	CTCTTCATGC GTCATACGTT GTGTCGATTG ATCAGTTGTT TTGTCTAAAT CACTAGCTTT	60
25	AAATTTAGAT TGATTGATT GACGTGTCGT AAATnGTTGT TCCTTTTGTT GCGGTTTGCC	120
	TTTTTTTCTT GATCTTATTA AAAATAAATT GATAACCCCA ACAATAATGA GCGCTAAAA	180
30	AATGTAGCTA ATAATGAAGG TCGTAGTCAT TTAATGACCC CCTTAATTTT TATGGATTTT	240
	TACTTCAGCG TTCaTTCCaG GAACAACCTTG TTTAGACGGT TcTGATTCTA GAGTGATTTT	300
	AACAGGTATT ACTTGAGAAA CTTTAGTGTA GTTACCATCA CTATTTGATG ATGGCATTAA	360
35	TGAAAagtTG CAGCAGTTGC TTTTCCAATA CTATCAACTT TACCTTTAAT AGAAGCTTTT	420
	TGACCGTCAA TAGTCACATC AACATCTTTA CCTACTTCAA CATCTTTAAT ATCTTTTTCG	480
40	TCAATATTTG CTGTTACATA TAAATCATCT AAATTGTATG CATAAGCGAT TGGGTTACCA	540
	GCTTGACCA TTGAACCTTC CATACCATCT AATTGGCAA TTGTACCTTT TTGAGGCATT	600
	TTAAGATCCA TATCTTTCGT TTCGCCATCT TGACCTTGTA CAGTAACAAT TGCTACTTTG	660
45	TCACCTTTAT CGAGTTTGTC ACCTTGTTTA ACATTAAAGT ATTTAATTTG TCCAGATGCA	720
	GGACTTGCTA TTTTAATTTG ATCGCCATTT ACTTTTGCAT TATCAGTTGT TACATAGCTT	780
	GTTGTTTTAT TCCAAAATA AAAGCCAGCA ATCCCAATGG CTAACnGTAC AACAACCGTA	840
50	ATGACATTnA AT	852

(2) INFORMATION FOR SEQ ID NO: 764:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 747 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 764:

5	ACATATTCGA CATTCAATTT AAATTGCATA TAACTACATT AACCATTTCAT TGTGCAGCGC	60
10	CTGTTGTTTA GATGATCATT TATTGACTTT TTGCTCTTAT nCCAnGCAAT TTTTGTATT	120
	ATTGCTTATA ATACATTTTA AGACAAATGT TTGTTTCAAC ATCGCATGCG ACATCATTAA	180
	YTATTCATTT AAATTTATCC AGTTTCTATT TGTCTGCAAT TGCTGAAAAT TAAAGGAGCT	240
15	TATTTTAAAT AATGGAACAA ATTATCACTG AATTTATTAG CCGTTTGGG TATGCAGCCA	300
	TTTTTATATT AATTTkATka GAAAATGTAC TACCTaTCGT aCCATCGGgA AATTATTCTG	360
	ACATTTGCTG GTCTTATGTC TGTTAAATCA CATTTATCAA TTTTAACTTT ATTTATTATT	420
20	GCAACTATCG CATCGTTTAT AGGGCTGTTA ATTTTATATT ATATCTGCCG TTTGATTTCA	480
	GAAGAACGTC TATATCGTTT TATTGATCGA CACGGTAAGT GGATTAAATT GAAAAGTAAG	540
25	GATTTAAAGC GAGCAAATGA TTGGTTTAA AAGTATGGCG TATGGGCTGT ATTkATCTGT	600
	CGTTTCATAC CTGTATTACG TGTaTGATT ACCATTCCAG CTGGTGkaAA CCGCATGAAT	660
	GTTGTGACaT TtACCGTTAT TTCATTAATA GGTACTACAA TCTGGAATTT CGGTTTAATT	720
30	TTACTAGGAC GCACTTTGAG CGATAGC	747

(2) INFORMATION FOR SEQ ID NO: 765:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 820 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 765:

40	TTTACCTTTT AACCAATCAT GCATTAATGC AATGTGTACT GTCTTAACAA ATGTTGCATA	60
45	TtCATCTTCT GCACTCCACT TTTTCAATTC CTGTTGATTA ATGGCATGTT TTTCTCCATT	120
	TTCCAACATA TTGACATACA ATTTATAATG TTTTCAACT GCCTGAATAA AAGCGAGTTG	180
	ATTTTTATTT AAATGTGATT TTAACTTTTC TAAATCTGAA TTAATAAAGT CTTCTATAGT	240
50	CGAATAAGAC ATATCTTGGT ATTCAACTAC TGCATTAATT TCATCTAATA ATTGCGATTG	300
	TGATTTTAGC GTTATATAAC TCTCGTCTCC ATAAGATATT TCTGTAGTAG CTGCTGTAGT	360
55	AGGATTTGGA GAACTGACTA AAATATGCTC GCCTAATAAT GCATTTATCa AACTACTTTT	420

TGTTCGTGG ATATCTTGCT TTGTACGCTT GAACAAAGGC ACATCCGAAA TTATATCAAG 540
 CGCTTTTGA ATATCTATAG ACATATTTGT TGTAGCTGTA TTTTGATTGA GCTGCTGATT 600
 5 ATCAGGATTA TCCTGAGCAT TATCAGTAGC CACTTGATAT GTTGTCTCTT GTCGACCTAT 660
 TAATTTATCT AGAGATTCAT CTAAATGAAT ATAGTAGTGA CGATAATTCT TAGTCGTCAA 720
 TGACTGACGC AGCTCATTGA ATTCTGTATA ACGTTGATAT TCTTTTAAAT CATCACTTTC 780
 10 TTCTGTTGGn AATTCATCTG CCTGCACATT TTCTAThATT 820

(2) INFORMATION FOR SEQ ID NO: 766:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 672 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 766:

TCAACATGAC ATTAATTTAA TAGCGATGCA TACAAATTTA GATGTAAATC CGTATGGTGT 60
 25 CAATATGATG TTGGCGAAGG CGATGGGTTT GAAGAACATT TCAATAATAA ATAATCAACA 120
 AGATGTATAC TATAAAGTTC AAACATATAT ACCTAAGGAT AATGTTGGAC CATTTAAAGA 180
 30 TAAGCTTAGT GAAAATGGAT TAGCGCAAGA AGGTAATTAT GAATATTGTT TCTTTGAAAG 240
 TGAAGGAAGA GGGCAATTCA AACCAGTTGG TGAAGCTAAT CCAACAATAG GACAAATTGA 300
 TAAAATTGAA TATGTAGATG AAGTTAAAT TGAATTTATG ATAGATGCAT ATCAAAGTC 360
 35 AAGGGcTGAG CaATTAATTA AACAAATACCA TCCATATGAA ACACCGGTAT TTGATTTTAT 420
 TGAGATAAAA CAAACATCCC TTTATGGACT TGGCGTTATG GCAGAAGTGG ATAATCAAAT 480
 GACATTGGAA GATTTGCGAG CTGATATTAA ATCTAAATTA AATATCCCAA GTGTCCGTTT 540
 40 TGTGGTGAK TCTAATCAGA AAATTAAACG TATTGcAATT ATTGGTgGTT CAGGTATTGG 600
 ATATGAaKAT CAAGctGTCC AACAAGGcGC AGATGTCTgT TACGGTGATA TTAAACATCA 660
 GATGCCTAGA TG 672

(2) INFORMATION FOR SEQ ID NO: 767:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 403 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

GAAAAAGTTA AACCTACTGT AACTACAACA AGcmaAGTTG AAGACmATCa CTCTACTAAA 60
 GTTGTmAGTA CTGaCACAAC AAAAGATCAA ACTAAAACaC AACTGCTCA TACAGTTAAA 120
 ACAGCACAAA CTGCTCAAGA ACAAATAAA GTTCAAACAC CTGTTAAAGA TGTGCAACA 180
 GCGAAATCTG AAAGCAACAA TCAAGCTGTA AGTGATAATA AATCACAACA AACTAACAAA 240
 GTTACAAAAC ATAACGAAAC GCCTAAACAA GCATCTAAAG CTAAAGAATT ACCAAAAACT 300
 GGTTTAACTT CAGTTGATAA CTTTATTAGC ACAGTtGCcT TCGCAACACT TGCCCTTTTA 360
 GGTTCATTAT CTTTATTACT TTTCAAAGg AAGaaTCTAA ATA 403

(2) INFORMATION FOR SEQ ID NO: 768:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 483 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 768:

TTCAATGCTC GTTTGTCTG CGTTAGTAAT TTCTAACATA TTCATTCACA TTTTGGAGCC 60
 TAAACTATCA ATCACCCTC AAATCATCAT CGTTTGTATT TTAATTGAAG CACTAATTGG 120
 ACTGCGTTTC TTGAAAGCGT ACGATGTTAA GCGTGGCAAA GATAAAGAAA ATAAGAAAAA 180
 TAGTAAGGAT TTCGTTAAAC TAAATCAAT TTTAGTAGCA ATTTTATTTA CATCATGGC 240
 GCTGACAGCA GGTACTGTAG CTGATATATA CGGTTTCACT GACTTAGGAA ATACTAGAAG 300
 TGATTTAATC GTTTGGAGCA TAGGTGGTAT TATATTTGGC CTCGTATGTT ACACAAATGGA 360
 AGATAAAAGA TAACGATAAG GAGCTGGCGA TTATAAGCT AGCTCCTTTT TTAACCTaTA 420
 TATGTAAAGA aCTaTCCTAA GGGkTTTTAA TCATATGTCA ATAATTTCTA TAATACATTA 480
 TTA 483

(2) INFORMATION FOR SEQ ID NO: 769:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 769:

ATTATATGTC TGATGTATTT CATGTCGTTA AAAATAAAGG TACGGAAGAT TTAAAGAAG 60

GGATGATGCT TGAAGGTGAA AAAATCAAAG CTTTTTATGA AGATATGCCA CCGTATCAGA 180
 CTGTCAAAAA AGGAACGATA CAAATTAAGC GTGATGGCAC ACCTATTATC CTATTAAATG 240
 5 TCATTATACG CTnGTAGCTA CCCGCAAATC GGTACAATCG CAGTTATCAT TTACGAATTA 300
 GCACAAAACC GCAGGATCAC GTTGAATTCC ATTATAGTAT TTACGGCTGA AGACTGTAAG 360
 10 nTAnACTGGT AACCATATCA TGGATGATTG ATCATAGATG 400

(2) INFORMATION FOR SEQ ID NO: 770:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 750 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 770:

ATCTCTTCTA CTTCTTTTAC AAATTGAGAA CGTCTTAAAA TGGCTTTCAC ACGGGCAACA 60
 ACTTCTCTAG GTKAAAAAGG CTTAGTCATA TAGTCATCGG CACCTAATTC TAAACCTAAT 120
 25 ACCCGATCAA ATTCATCATT TTTGCGCGTT AACATTAATA TAGGGACTAA ATTTTTATTT 180
 GTTCTTACAG TCTTACATAC GTCAATGCCA TCTTTTTTATG GTAGCATAAC ATCTAAAATA 240
 30 ATTAAATCTG GCTGTTCACT TTCTACCTTT TCTAAAGCCT CATCACCATC AAATGCGACA 300
 ACAACTTCaT AACAGCTGk TTCTArGyTA TATTTAAGTA ATGgTTaCGa TTGaATGtTC 360
 GTCATCTACT wCCaACACTT TTTGCGACAT GGtATGCCTC CCTAACTtAk AATTATATTT 420
 35 cATTATAACC GAActATTTA TAAAAATAmC ATCCTACACA TTATCTTTAC ACATTTTTTA 480
 CATTACTTTA CATATAAATA AAATACTTCT TATATTTCTT TCTmTCATTT GCATGACTTA 540
 CTCTGGGACA ACGAAATAAA TTTTGTAATA ATAGCATTTT TATCCCACTA CCTATGCATG 600
 40 AGTTTTACTC ATTTATTCCT AAGCTTATGT ACATATTGCG TTTGTCTAAT GTGTAAGAAA 660
 CACTACATAA TCAATCATTG GTGACTCTTT ATTATTTCTA TCCTGTTGCC AaCTTCAATT 720
 45 CATTTAAAAA GGCGAACCTA GCAATTAAAG 750

(2) INFORMATION FOR SEQ ID NO: 771:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1462 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

	ATTTAATTAT TATTTTCCCA AATCAATACG ATATAATTTT ATGTTTTTAT CTTTTGGTGC	60
	TGAGGCAAAT TGATAAGtCG TTTTGCCTTT TTCAATATAT CCAAAATTAC CAGCAACTTT	120
5	GCTATATTCC GTATGTGTTA CTGCTTTGCC AACATAATTT TTAACAGCTT GATATGTTGG	180
	ACCATTAGCA TCATTATACA TCATTGAAAT ATGAGTTACT TTACCATTGT TTTTCTTACC	240
	ATCAGTAGTT ACTAATAACA TACCTTTTTT AGTATGGAAT TCGTAATAAT GTTCAGTTCC	300
10	ATCITCATIG TAAGAATACA TCGGATTTTT GTACTTAGTT AAAACATCTT TAATAGATTCT	360
	GCCAATTTTC ACATTTTCTA ATGACTGATC ACCCTTAATT AATTGTTTAA CAGTATCAAT	420
15	AGAGTTGCCA CTTGCTGCTT CGGCACTAGT GTTCACTAAG CCTACTCCCA TTACAACAGA	480
	ACATGCAATT ATACTTGCCG TTAGTAGCTT TTTCATAAGC ACTCTCTCCT TTTATTTATA	540
	TCGTCTTGTC CTCACAACCA TTATACAACA ATCATTCTTA AAACAACAGT CATATTACAA	600
20	TTATATTACA AATAATAATT ACTACTTTTA TATTTCACTT ATCACTAAAA ATTAAACATG	660
<hr/>		
	CTTTTCATCG TGATGTTTGT TGATAAATGC AGCTGTATCT TCGACGAATC TTTCTTGCTC	720
	TTCAACAAAT GGAATGCAC TTGATTCTTG ATATACTTCA AAGTCCGCAT TTTGGATTAA	780
25	ATCAGCTACT TCTTTAGCTT CTAATCTTGT TGTTCTTTCA CCGAATTCTC CTGCAATAAT	840
	TTTTGTGGT ACTACGACAT TTCTATAAGT TTGAGAAATA TCAGCGTTTT TGAATACCTC	900
	TTTAACTGCT TGAATTTCTT CTTTAGTTGA TATTTCAATT GTATCTACGA CATGTTTGAG	960
30	GAATCGATTG ATTTTTCTCG GACGATAATA CTTACGCTTA TTAAAAATT TAwCyTGtTT	1020
	TTCaGGATCC CaGTTtCGAA TAATATGGGC ATaTTTTCTA AATAAACGTT CTTCCGGTAA	1080
35	TTACCTTCA ATAGATGTTG GATTTACCAA CGTAAGTGAT GATGTAAATT CAGGATAACG	1140
	TACTGAAATA TCCGCACCAA TGATTCCACC CATTkCATGG cATACAAATG CAACTTCTTC	1200
	AATATATAAA TATTTAAGTA ATTCAACAAT GTCATCAGAA AAATCTTTTA TTTCAATGTG	1260
40	ACGAGGTTTA TCAGAATAGC CATGTCCACG TAAATCAATT AACACAACTT GAAATGATTT	1320
	TGCTAATTCT GCTGCTAATT TATTAAACAC AGAATAATTA TCAAGTACAG TATGAATCAA	1380
	TACGATAGGA TAGCCTTCAC CTAAnGTACT GTAATGTATC GATGTTCCAT CTTTTCTAGT	1440
45	AAATAGATCC ATAATTTTCT CC	1462

(2) INFORMATION FOR SEQ ID NO: 772:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 704 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 772:

ATTATTATAA GGAGTTATCT TACATGTAA ATCTTGAAAA CAAAACATAT GTCATCATGG 60
 5 GAATCGCTAA TAAGCGTAGT ATTGCTTTTG GTGTCGCTAA AGTTTtagAT CAATTmGGTG 120
 CTAAATTAGT ATTTACTTAC CGTAAAGAAC GTAGCCGTAA AGAGCTTGAA AAATTATTAG 180
 10 AACAAATTAAT TCAACCAGAA GCGCACTTAT ATCAAATTGA TGTTCAAAGC GATGAAGAGG 240
 TTATTAATGG TTTTGAGCAA ATTGGTAAAG ATGTTGGCAA TATTGATGGT GTATATCATT 300
 CAATCGCATT TGCTAATATG GAAGACTTAC GCGGACGCTT TTCTGAAACT TCACGTGAAG 360
 15 GCTTCTTGTT AGCTCAAGAC ATTAGTTCTT ACTCATTAAC AATTGTGGCT CATGAAGCTA 420
 AAAAATTAAT GCCAGAAGGT GGTAGCATTG TTGCAACAAC ATATTTAGGT GGCGAATTCG 480
 CAGTTCAAAA CTATAATGTG ATGGGTGTTG CTAAAGCGAG CTTAGAAGCA AATGTTAAAT 540
 20 ATTTAGCATT AGACTTAGGT CCAGATAATA TTCGCGTTAA TGCAATTTCa GCTAGTCCAA 600
 TCCGTACATT AAGTGCAAAA GGTGTGGGTG GTTTCAATAC AATTCTTAAA AGAAATCGAA 660
 GAGCGTGCAC CTTTTAAAAC CGTAATGTTG ATCCAGTAGA AGTA 704
 25

(2) INFORMATION FOR SEQ ID NO: 773:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 427 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear
 30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 773:

GACCACGACA CCACAAGCTA TGAAGAATGC CyTTGTTAAG CCGCctTTGa ATTGCATAGA 60
 GATGAAAATA CCAATATTAA TAAAGAAGTT ACAGAAAATA CCTTTTGTAa AAATATTCAA 120
 40 CCATGTTGAA TCAACAGTCT TTTTCTGAAC TAAAGCTGTT AAAGCTTGtG TCATTTTCAGG 180
 TGTCATGACA TCGCCAAATT TCATTAAGAA AAATAACACA AACCACCTA AAATATTTCC 240
 TAAGAAACAA TATAATAAAA TCCAAGTCAT CTTCTTAACA GAAACGACTT TATAATACCA 300
 45 GCCTACTGTA AAGTACATGA AGTTACTTGT TAATAATTCA GAGTTAGTTA ATACAACTAA 360
 AATCAAACCT AAACATAACG CAATGGCTCC CATTAAATTG ATAAGTCCAT CTACGTGAGT 420
 50 ACTCGCA 427

(2) INFORMATION FOR SEQ ID NO: 774:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 400 base pairs
 55

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 774:

	AGGTGAGCAT TATTAAATAT TGCCAAGAAA TCAAACTAA AAACATATGCA AAAGATGTAG	60
10	ATATATTATT TATTCTTGGC GGTGATGGCA CGGTTAACGA ACTTATAAAC GGTGTTATGA	120
	CACATGACCT TCAACTCCCT ATTGGCATT TACCAGGCGG TACTTTTAAT GATTTTACAA	180
	AAACGCTAAA TATAGCACCT GAATCATAAA CAAGCTAGTG AACAAATGGA TTTCTGCACA	240
15	AGTTGGTACA TACGATGTAA TTGAAAATGA AATGAATCAA TATGCACTCA ACTTTGTGGG	300
	CTTAGGTCTC ATGTTCAAAA CGCGGAAAAC GTACAAGAGG TTCAAAAGAT GTATTGGGTA	360
20	AATGGAGTTA TATTGGGTCC ACCGTCCAAA AChCGGCnAA	400

(2) INFORMATION FOR SEQ ID NO: 775:

(i) SEQUENCE CHARACTERISTICS:

	(A) LENGTH: 484 base pairs
25	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: double
	(D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 775:

	AATTATTCCT CAATAGGAGC ATTACCGCT CTCTACCAA TTCCCAAAAA TGTAGTTTCT	60
	ATTTGCTTTG CACCATTAA AATTGCAGCT AATGTATTTG CAGTAGCCAA CCCTAGATCG	120
35	TTATGACAAT GAGCAGAAAA AATTATGTGA GAATATTTTT TTACAAAGTA ATTAAAAATA	180
	TCTCCGTATT CTAATGGTGT CGAACATCCT ACAGTGTCGG CAAATGTAAC TGTTCCTAACT	240
	TGATATTTTG AAATAATTC CATGTATTCT TTCAATTTTT CTCTAGAAGT CCTTGTTCCA	300
40	TCTTCAAAAC AAATATCTAC TCCTTTTTTA TCTTCTTTA ATATATCCAA GCAGTCTTTG	360
	ATTTCTGAA TATAATATTT ATTTGAAAAA TTAAGCTTTT CTTTATATG CAAGTCAGAT	420
45	ATTGGCAATA GTATTTTAC CACTAAATTA TGAATTTTCA ATTGACTAT TTTTgGTATG	480
	TCnT	484

(2) INFORMATION FOR SEQ ID NO: 776:

50

(i) SEQUENCE CHARACTERISTICS:

	(A) LENGTH: 788 base pairs
	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: double
55	(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 776:

	CGCAAGATGA AGTTAAAGAA CTTAATCGCT TATTAGGTAA AGTCATTCAT GCATTTGATG	60
5	AAACAAAGGA AAAATAATTA ACTTTTGTCA TGACAATTAA AGTAATGTTT AGAATTTATT	120
	AAGAATAGAA AAACAATTAG CACGCGTAAC TTGTTAGTAA AAAAAGTCTG TGAAAGGTTT	180
10	CTTAGCCTAT CAAGCAGTTT TTTTATGCAT TATATTGAAT CATATTCCAT AAAGCACCTT	240
	GATTAGCTAG TAATTGTTGA TAGTTTCCCT TTTCAACTAT TTTACCATTT ATCATCACAA	300
	TGATGGTCTC AAAACGTGAC AATAAAGTTA AATCGTGTGT AGCAACAATT AATGTTTCTG	360
15	CATGTGCTTC AATTAAATCC ATAACCTTTT AACTATTTTG TTTATCTAAT GCAGTTGTTG	420
	GTTTCATCTAA AATCCATGTT GATGCAGTAT CTTTAAATAA CATCCTCGTA ATCGCTAAAC	480
	GCTGAATTTT TCCGCCAGAT AATGTATGAC CATCTAAGTC AATTGACGCT tCTAGTGCCA	540
20	AATGTTCTAA ATCTAATTGC TTAAATATTG CTGACCCGC TTCATCTTTT TCATCGGTAA	600
	ATAAATTTTG ACGTATTGTA CCATCAAATA ATTGTTGAGA TTGTAGCAAG ACATTTAACG	660
	ATTCAAACCTT ATCTTTGTcA TCTATTTCAA ACATATCCAT ATTTTCGAAA CGAACAGAGC	720
25	CACTATCTAA TTGATATAAC CCTGCCATAA TTTGTAGTAA TGTACTTTTT CCTGAACCAG	780
	AAGGACCC	788

(2) INFORMATION FOR SEQ ID NO: 777:

30	(i) SEQUENCE CHARACTERISTICS:
	(A) LENGTH: 1145 base pairs
	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: double
35	(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 777:

40	TTACAAAAGA AATGCAACAA AATTTTGTAA TCATTACATT TTTTATAAA AATTTCACCT	60
	TAGATTCACA ATAATTACTT ATTTGTCAA TTTATTTAAT GTCAATATGT TGATTAATTA	120
	ATAGTGTGTT CTAATGTATA TAATATTTAG GTCATCGTTA TAGTCAACAA TAATAAGGTA	180
45	TTTCGAGTTG AAATTATCTT TATTATTTT CCACCTTTTAC GTGCTATCCC ATTACACAAA	240
	AACAAATAAG TAAAGATATT AAGTACAAA AAGTGGAACA CCTGTAGAT GCTCCACCTC	300
	AATTATATTA AGTTATATTA TTTTGTGCTG TGGTATAATT CATCAACTTT TTTCCAGTTA	360
50	ACAATGTTCC AAAATGCAGT CATATAGTCT GGACGTTTAT TTTGATATTT CAGATAGTAG	420
	GCATGCTCCC AAACATCAAA TAGTAAGATT GGTGTTTTGC CTTCTGTAA TGGATTATCT	480

55

EP 0 786 519 A2

	GATCCAAATA ATGTTGTTGC TTTATTTGCA AATTCATTTT TAAATTCATC TAAAGTGCCC	600
	CACTGCGcTT TGATGTCATC TATTACGCCA CCTTTTTCTT CAGAATTAGG TGATAGTATT	660
5	TCCCAGAATA ATGAATGGTT AAAATGACCA CCGCCATTAT TACGGACTGA CATCCTCATC	720
	GCTTCCGGTA ,CCTTGTCTAA GTnAGCAATC ATATCCGCTA GTGATTGATG CTCTAACTCT	780
	GTTCCCTTCAA CTGTTGCGTT TAATTTTCGTC ACGTACGTAT TGTGATGTTT GTCGTGATGA	840
10	AACTCCATTG TTCTTTGATC TATATATGGT TCCAATGCAT CATATGCATA TGGTAAATTT	900
	GGTAATTTAA ATGCCATAAG TATATTCCTC CTTTTATGAA TATACTTTTA TAATAATTA	960
15	TTTTGGGTGT GTTTTGCAAT AATTATTATT TATTTGTTAT ATCCAATTAT ATAAAATTTA	1020
	AATATTCGAA ATTGATATAA TATTTAATAT TGAATGCAA AAGGCATTTA ACTGCTTTTG	1080
	TTTCCCGCTT TTAAAGAGAA TTAAAAAGA CAACTTCCAT TTTCAATAA GAAATTGCCT	1140
20	TTTCT	1145

(2) INFORMATION FOR SEQ ID NO: 778:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 902 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 778:

	AAAAGAGGnC CAATATTATC AATATACGGC CGGAAGATTC CCTTTTTCTT CTCCACTTAC	60
	TAAGCCCATC AATGGTGTAT GTTATCaATT GGTGCTATCC GCATTAAATA ATTATCTTCA	120
35	ATTGTGGTAT CAAAGCTATT CGCTTTTTCT CCAATAATGT CTTACCATA TTTATTGAAT	180
	GCACCTACTA AAATCAACAT AAATGGAATT AACAAGGTTA CTACAATTGC CATTCTTATA	240
40	AATTGTGGTA TATAAGAAGG TCGCCAATTT AAAGCTTTAA TACCTTCTTW TCTAAATGGA	300
	GTTCCTATAA AGCGATATGA TAGCTCTGCA AATATAATTG TTAAACTTAT ATCTATAAAG	360
	TACACATATA CAGGTATCTG TCCGTCTACA TAGTAACTAT GTACGAAACT AATTACTGCA	420
45	AAATGCCATA AATATAAACT ATAAGACCTT TTCCCGATAA ATACTAACAC TGGATTTGAA	480
	AATATCTTCG CtATCCATGT AGATGGATGA ACGACACTAG CAATAATAAA TAACGTTAAT	540
	ATGGATATTA AATAGAAACC ACCATCATAT ATCCAATTCG TCTCATCATT AATAATGAAA	600
50	AATAATAATA TAAGTACTAT AAATGATAAA CTACCTATGC TATCAATAAC ATATTTTACA	660
	ACTTTAGGTG GATCATTTTT CAATTTAAAC GGTGGCCATA AAAAAGCTAA AATAACACCC	720

ATACTATAGA TAAACATCAT TAACCCTAAA GAAATTATTG ATACTCCCCA AAAAATAAAT 840
 CCTATTTTGT ATCGCTTTTT AATTGTTAAC AATAATGTAA CCAAATAAC TGGGAAAAAT 900
 5 AT 902

(2) INFORMATION FOR SEQ ID NO: 779:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 779:

GGAATTAGTT TCCTAATGAT CAAACCATAA CCATTAGCTT TTAATGATGT TACGCCTTTA 60
 AAGATTAGAG GATGATGACT AATAATAGTA TTATAACCTT TTTGATTGC TTCATTTACT 120
 ACTTCCAACG TACAGTCTAA TGCTGTAAAC ACACCAGTAA CTTCAACATC TTCATCACCT 180
 ATTAACAATC CTACATTATC CCAAGATTCA GCAGTACTAA ATGGCACATG ATGATCTAAC 240
 AATGTCATTA AATCAGCTAT TTTCATACTA TAACACCCTT TCAATTACaG CAATTTCGTC 300
 aTTAATTTGa GCTAAACGTT GakGAkGTTG TTCAGTawTG AGtTTCGaTT TAAtATGATA 360
 AAgTGCyTct AACTCtCTTT GcCATTtTTT TATAAAATAT 400

(2) INFORMATION FOR SEQ ID NO: 780:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 557 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 780:

GTTCTGTTT TAACATCAAT ATCTATCTTT TTAATATCTT GAACATAAAG CAGATTCAGT 60
 TGGCTAATAT TTGAATTTAT GTTAATCACT TTTTCGTTT CATTTTTAAA ATGTACTGTG 120
 TAAGTnGCTT TTTTGCATA TTTTAATTCA CGTTCCCCGA TACCTCTATC ATGCTTCAAT 180
 ACTGaTTTAA CTTTTTTAGA GATATCTTTG TAGCCTACAC GTGGGTCACC TGTAATTTT 240
 AAATCTGaTA AAATTGGTGT TGATGTGCCA TTTACTGCAA TTGTGTATGG TACATATCTG 300
 TCTGCTTTTCG CTTTAGTTCC TGTTTTAACA GTAATTTCAA TTCTCTTAAC ATCTTTTCGCA 360
 TGAAC TAAGT TTGCTGTGTA ATTTTTTGAA TTCAACTGTA AGATTCTTTT ACCACCATTT 420

CTATCATGCT TCAGTACTGA TTTTATTGTA CTAGTTAAAT TTTTGTAATT TGTCCAAGGT 540
 TTATnTGAAA ATGAAAG 557

(2) INFORMATION FOR SEQ ID NO: 781:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 781:

TTCTGATAAC ACAACTTTCT TGGACCAAGT GACAATGGTA AAGTTGATAT TCTCAAAAAA 60
 TATATTTTAT TGAAAAGGTA ACTATATCGA CCGCTCTGTG CGACTTGCTG TG TAGAAACA 120
 TCAAGCCCAG CTTGAAACTT CATATAAACT AATAACTTTT GATAAATGCT ATTCCCAATT 180
 TGTTCACTACT GCTCCAAGTT ATCATTAAATT CTAAATTTAA TACTTACTTC ATTTTAACT 240
 GGAATAAAAT GTACATCACT CGCTTTCATT TCTATCGCTT TATTAAATTAT TTCTTGAAAT 300
 AGAATCTTCA AAAAAACACC TCCTACATAT AATCACGTAG GAGGTGTTTT TATTACTTCA 360
 ATTTAACCGT GTAAAAATGG ATTTAATTGT TCATCATCAA CCGTCGTATA TGGACCATGT 420
 CCAGGGAATA AAGGTAAATC GCCTTCTAAT TCAAATATTT TATCTTGAAT AGAAT 475

(2) INFORMATION FOR SEQ ID NO: 782:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 782:

ATGAATATCG GTGCAGGACG TATCGTTTAT CAAAGTTTAA CTCGAATCAA TAAATCAATT 60
 GAAGACGGTG ATTTCTTTGA AAATGATGTT TTAAATAATG CAATTGCACA CGTGAATTCA 120
 CATGATTTCAG CGTTACACAT CTTTGTTTAA TTGTCTGACG GTGGTGTACA CAGTCATTAC 180
 AAACATTTAT TTGCTTTGTT AGAACTTGCT AAAAAACAAG GnGTTGAAAA AGTTTACGTA 240
 CACGCATTTT TAGATGGCCG TGACGTAGAT CAAAATCCG CTTTGAAATA CATCGAAGAG 300
 ACTGAAGCTA AATCCATGAA TnAGGGCATn GGCCATTTCG ACCGGGGCCT GGCCGTAATA 360
 AGCCAAngGA CCGGGCCAAC CGTTGGGACC GGGAAGAAAA 400

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 810 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 783:

GATTAATGTA CTCGTGTACA TAACGTTTGA AGTATGATAA ATAGATATAG AAATAAAGTC 60
 ATATGTGACA TCAATTAAAT GATGTTCAAA TGACAAGATA CAATAGAGGA ATGTTTGTA 120
 TAAAAACGCT TCATATAAAG GTCGAGTCAA TATATGATAC GACTTTATAT GAAGCGTTTT 180
 ATTTGCTATG AGCTAGTATA TTTTATAATA ATTTTCTAT TTCTCTTTCG ATTTGAACAG 240
 GTTTTTTTTG AGGTGCAAAAT CGTTTAAACAA CGTTACCTC GCGATCCACT AAAAAGTTAG 300
 TGAAATCCCA TTTGATTTTC TCATTAAAGA ATCCGTGTTG TGCCGCAGTC AAATATCTAA 360
 ATAAAGGTAA TTGATGTTCC CCTTTTACGT CTATTTTTTG ATGCATAGGG AAGGTAACAC 420
 CATAGTTTAA TTTACAGTTT TGAGCTGCTT CTTCGCCTGA ACCAGGTTCT TGGCCACCAA 480
 ATTGATTACA AGGGAAACCT AGAATTACAA ACCCTGATC TTTGTATTTC TCGTATAATG 540
 ATTGCAAACC TTCAAATTGT GAAGTAAAGC CACATTCGCT AGCTGTATTA ACAATTAGCA 600
 TAACGTCACC CTTATATGCA TCTAATTTGT AAGTAACACC TTTATTTGTT TCTACTACAA 660
 AATCATAAAT TGTCTCCATT GTATCATCCT TTCGATTTAC TTAAaATGTA CCACAAAATC 720
 GTGTAaTAGT CTkTACTaA ACTCTATGAT AGAATACTTT GAGTAGGATT TTATTAAGGA 780
 GATGTATAAC ATGGnTCAGC AACAAATTCA 810

(2) INFORMATION FOR SEQ ID NO: 784:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 788 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 784:

AAATTCATTG CAGAAAACAT AGATAAATAA ACAAATTGAC TTTAAACGAG CGTTGCAACA 60
 TATCTCGAAT TGTAAAGGAG CTTGAAAATG AATAAAAATA TAGTCATTAA AAGCATGGCA 120
 GCATTAGCCA TTCTAACCTC AGTAACTGGA ATAAATGCTG CAGTCGTTGA AGAGACACAA 180
 CAAATAGCAA ATGCAGAGAA GAATGTTACG CAAGTTAAAG ATACAAATAT TTTTCCATAT 240

ACCAATAAAC ATGTATCAAA AGATTATAAA GTTGCGGATA GAATTACTGC CCATCCAAAC 360
 GGTGACAAAG GAAATGGTGG TATATATAAA ATTAAAAGCA TTTCTGATTA TCCGGGTGAT 420
 5 GAAGACATCT CTGTCATGAA TATTGAAGAA CAAGCAGTCG AACGTGGACC AAAAGGCTTT 480
 AATTTTAATG AAAATGTCCA AGCATTCAAT TTTGCGAAAG ATGCTAAAGT TGATGACAAA 540
 ATTAAAGTTA TTGGTTACCC ATTACCTGCT CAAATAGTT TTAAACAGTT TGAATCTACA 600
 10 GGAAGTATAA AAAGAATsAA AGACAATATT TTAAATTTTG GATGCCATAC ATTGGAACCC 660
 GGGGAATTCA GGGATCACCA GTTCTAAATT CTAACAATGA GGTCTAGGT GTGGTGGTAT 720
 15 GGGCGGGTAT TGGGAAAAAT TGGGTTCTGG AATAATAATG GGTGGCCGTA TACTTTACGC 780
 CTCCAnAT 788

(2) INFORMATION FOR SEQ ID NO: 785:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1023 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 785:

30 CAATATTTTA GAAACAaTAA TTAAGTTCG ATGAACAAAC TATTAACAAT AATCTTGAGT 60
 ATTATATTTA TCTTAATTAA TAATATATTT ATTAAAGATT ATGTTACTTC CAACTTTCAA 120
 AGTAGAAAAA CGGTATAATT TGTGATGGG TGTTTATTGA TAAACTGCAA AAAATACAGC 180
 35 CTACAACCAC ATAGATTGTA GACTATATTT AAAATAATAG GTATTTATCA TATCTCGTAA 240
 ACTTAGTGCC AATTTTTATA CTCGTGGTGC TGGTAAGCTA CCCTTAAATT CAGGAACGTA 300
 GTGTGTaGGG CTATAACTTG GAACAGCATA TTGATAATTT ACATTTTGA TATTTAATGA 360
 40 TGGTTTCCCA ATTTTATAAC CATTTGATTG TGAAAATGAG AAATAKTTCT TCACACCTTT 420
 AACTACTTTA TAAGAATAGA AGTATTTATA GTCATATGCT TTATTTACTT TAGCATTTTG 480
 45 ATGTGTTGCT GTTGTGTTAT TTTGGAACT TGGTACATGC ATACGATGTG AATTGTGACC 540
 ATATGGTGGA ATTACCTTGA AACTATTTAT TTGTGGCACA ACACAAAAGT GATTAAATTT 600
 AATGCTAGCA TGCCCTGGTG TAACAAATTT ATGCGCGTGA TATCCAGGAA CTGCAAAATG 660
 50 ATGCTTGATA ATTAAAGATT gAGATGGATG TGTATATCTA GGCGATTCTG ATGGTTTAAC 720
 AATAAAGTGT TTATTAATAG AATCCTTTGC ATGATTTACA TGTTTATGTA CATGTGTTGA 780
 55 TTTGTATGAA GTAATAACTT TCTTGTAGTG GGTTCGCGTA GTAATGAAGT GGTGGTTTAC 840

TTGTTGTGAA GCTGGATTGT TTGTTGCTAC ATTCACGCGA TTATTGATTT CTTTGTACTC 960
 TGGCACAATG TTTCCTAACT TTGATTCTGG nACGACAAAG TTTTATCTA CAATTTTACT 1020
 5 AGC 1023

(2) INFORMATION FOR SEQ ID NO: 786:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 786:

TCAAGTTTAT TCGCTTGTG GAAAGCTTTA ACTTGATTTT CTAAAGCTTT ATCAAATTGC 60
 GTTGATTCAT TATCAACTTT ATAACCTAAA GCTGATAAAC CAATTTTAAT AGTTTAAATA 120
 TTTTATCAT CGTCTCCAAC TTAAATGTT TTCGTATTAG GAATGACATT TAAAGATTGA 180
 TATTTAGGTG TGTC AATAGT AACGCTCTGGT TTAATGCCTT TACCGTGAAT ATAATGACCA 240
 TCTGGCGTTA ACCATTTTAT TTCAGTATAT TTTAACAATG AACCATCCTT AACTCTCTT 300
 GTAGTTTGTA CGACACCTTT GCCGAATGTT TTTGACCCAT AAACCTTAGC TTTATTATAG 360
 TCTTTTAGCG CACCAGTAAA CACTTCAGAA GCGCTAGCTG AACCTTCATT CACTAAGATG 420
 GATATATCCA TGTCTTTCGC TTCTTTTAAC GCATCATTAG AAGTtGAATT GCTCAGTACT 480
 TTACCTT 487

(2) INFORMATION FOR SEQ ID NO: 787:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 803 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 787:

GnAAACnATA TTTAnAATTA AGTGTTTCGAT TTGCAGTAAA TTCATACAGA AAAGCTAAAA 60
 TTAATATGAT ACaGTGGAAT AATGTCACAT TCTCCATAAA TAATTGACCG AAGAAGCATA 120
 AAACATAGAA TAGTACAGTA AACTTACCG GCTGCTTTTC TTTATATATA ATTGCATTAA 180
 TACAATAATA AATAATAAAG AGTGAAATTA GTGTTGATGT CGCATAATTA TAAATCCTG 240
 CAAACCAGCC ATATGTATCT GCATAAATAG CACTTGGTAA AATTAACATT AAAGAAAATG 300

EP 0 786 519 A2

	TGCCCATACT AATGAGGCCA TATGAAAGCC AACGTAACCA GCTTACATGT ACAGCTATAA	420
	TTTCAAAGAT ATTTCCGATA TAGCGACCAT TAAGTGATGC AAATCCTACT TTTAAAATAT	480
5	CAGTATTATA ATTGCTAAAC CATTGTAAAT CATCGTGCAT GAGTGGTAGT AAGATACCCA	540
	TAAAAGTATA AAACAATAAT ATCGCAATTA ATATCAAAGT TGTCTTGTGT AATTGAATTG	600
	TTTTCACTTT GCTAATCCTC AAATCTAGTT AAATTTTCCT CAACTTGTAG GTCGAAAAAT	660
10	TAATTCAATA TTTTAAATGT ATTTCTAATT TTCACCTATG CATGTTTCCT CAATCAAATT	720
	AGATAAACAA GGTATTTAAT ATTACTTTCA ACAATTTATC TAAATCGCCC CTCGTCTTTT	780
15	TCTATGACGA ATGATTACAC TTG	803

(2) INFORMATION FOR SEQ ID NO: 788:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 788:

	GAAAAGTTGT ATTATGAATA AAGTTAATCA AGGTGCTCAG GAAGAGGCAA TGGAAGAGTT	60
	ATTAGTGACT TTTCAAAAAT TGATTAAAGA CTAAAGGAGT TTAAGATGAT ACATCAAAAT	120
30	ACGATTTACA CAGCGGGAAT TGAAACAGAA GAACAAGTAA GTCAATTGAC AGAACGCATT	180
	TCAAATATGA TAGGTGTTCA TCAAGTGAAT ATTAATATAA TAGATGGTCA AGTAACTGTA	240
35	TCGTATGAGA CACCAGCAA TTTGAATAGT ATTGAAAAAG AAATCTATGA TGAAGGATAC	300
	AAAATTGTAT TTTAGGGTAT AATGTAGAGT GCGCTATAGA TTTTAATTTT GAAAATAAAT	360
	TAAAAATTTT GTAAATGATG TAGTAAAGGT ATGTCGAATA	400

(2) INFORMATION FOR SEQ ID NO: 789:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 762 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 789:

	GTTTAAAGAT GGAGAGATTA TTGATTTTTC AGCTGGAAAA GGTGAAGCGG TATTGAAAGA	60
	TTTAATCAAT ACTGATGAAG GTTCAAGAAG ATTAGGTGAA GTAGCATTAG TACCTGATGA	120

ATGTCAITTA GCGATTGGAT CTGCTTACGC CTTTAATATT CAAGGTGGAA CGGAAATGAC 240
 TGTGAGGAA AAGATTGCAA GCGGATTAAA TGATTCAAAT GTACATGTCG ATTTTCATGAT 300
 5 TGGTAGTAGT GATTTGACTA TTTATGGCAT ATTGGAAGAT GGTTCAAAAG AACTAGTATT 360
 TGAAAATGGA AATTGGGCAT CAACATTTTA ATAAATGTTA TTTTGAGGTG CTGAGTAGGA 420
 AATGAAACAT GTATTTAAAG GTCAAATACG TGATTAAAGT ATAGATTGGG AGATAAAATA 480
 10 ATGACAAATC AGGACAGACC AATGAAATCT ATGTCAGAAT CAAAATGTTA TAAAAATAGA 540
 CAAGTTTTCC CTCAAGATAC GAATCACCAT CATACAATGT TTGGTGGTAC ATTGATGGCT 600
 15 AATATTGATG AAATTGCAGC AATCACAGCT ATGAAACATG CTGGTGCACA AGTAGTTACC 660
 GCATCTACAG ACTCAGTAGA TTTCTTAAAG CCGATTAAAA CAGGGGACAT ATTACAATAC 720
 GTAGCGATGG TTTCATACGC TGGGACTAGT TCAATGGAAG TG 762

(2) INFORMATION FOR SEQ ID NO: 790:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 790:

TTTAATTTTA TCTTTTGGAT ATCACATAGA TGCTACTTTT CTATACTGTT CTAAATCTAT 60
 TATTTCGTCA CATTGATTG CAATAGCCAT ATCATGTGTT GCTAAAATCA GCACTTTATT 120
 35 TTCATCGACC AAACCAAATA ATGATTGAAT AATCATCTGT CCTGTTTTAG GATCTAACGC 180
 ACCCGTTGGT TCATCAGCTA ACATAACAAT CGGATCTTTT AACATCATTC TAATTAAAGC 240
 GACACGTTGT TGTTACCTC CACTTAGCGT ATGAACTTTT CTTTTTAAAC TGTTTGACAG 300
 40 ACCAAACTGT TCTATATAAC GtATCTttAT TTGTnCTTTT TCTTTCTTAC TTATTTTTTT 360
 ATATGCTAAT CCAATATCTA AATTTTCATT TACTGnCAAA 400

(2) INFORMATION FOR SEQ ID NO: 791:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 791:

AACGTAAAGC GGAAGTTGGG ATGTTGAAG ATGCTGAATT TCATGCGCAA CTACATCGTT 120
 ATAATGCTTT TCTAGAGCAA CATCAAGATG ATAAAGTGTT GTATTTnGAA ATTGGAATTG 180
 5 GTTATACTAC ACCACAATTT GTGAAGCATC CTTTTCAGCG TTGACACGTA AAAATGAAAA 240
 TGCCCTTTAT ATGACGATGA ATAAAAAGGC TTCGCATTCC GAATTCAATT CAGGACGTAC 300
 CATACTTTAA CTGAGATTCT CAACTTGTTT AGCAGACTCC GGACGCAGCA CACGAAATAC 360
 10 ACATGGGGGC AGAGTnACTT ATGGACCGTT GAATGnGATA 400

(2) INFORMATION FOR SEQ ID NO: 792:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 678 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 792:

GTTCCGTTTG ATACAGAGAA GCGAATGTAA GCATAATCTT TAACAGTATC GTATGATATA 60
 25 AATTAAATTGG CAACTTTTTG TCACCTTCAT AAACCTCAAA TTTTCTCCAA AATTGACCTG 120
 ATTGTAATCC TAATTCAATT TCTGGTTTTG AATCAGTGAA AATAACTCTA GCAGGTTTAA 180
 30 CAGAACTTGC ATAATGATAA AACTGTTGAG TTCCATCTTT CTTTTTCATT TCAAAATCAA 240
 TTGGACGAGA GTTTGGTGCG CTATGATCTT TGTCTTTTAT TGCAGGGTTT TTAATCGCTT 300
 CTCTAAGTTC CTGATTCAAA ATAGGATAAG TATTGTTAgT GGCyTTTGCT GCTGGTTTAA 360
 35 CTTCTTTTGT TTCCTTAGGG GcTTTAACTT CTTTAACTTC TTTAGCTTCT TTTGTTTCAG 420
 AAGTAGGGGC CTCAACTTCT TTATTAGATA CTGAGACAGC ATTAGCTACT GGTTTAGTTT 480
 CTGGAGCTTT TTCAGATGTT GTTGTGGAC TTGCAACTGC TTCAGTTTTT GGTGTGCTT 540
 40 CTGTATTTGT ACCACCTGTT TCTTCAGCTG CTGCTGTGT TCGCCATTG ACATTAATAA 600
 TAAAAGTGTA CTAATTGCTA CAGATGCAAC GCCTAGTGAT GACTTTCTAA TTGAATAAAA 660
 45 TGATTTAAAT TCTTTTTG 678

(2) INFORMATION FOR SEQ ID NO: 793:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

ACTGGCGGAT CCACGATGGC ATGTGTTAGT GAAGCAATTC ATTTATTACC ATATAATGTA 60
 TTCTTCGTAC CAGCCAGAGG TGGACTAGGC GAAAnTGTTG TCTTTCAGGC AAACACAATT 120
 5 GCAGCCAGTA TGGCACAACA AGCTGGCGGT TATTATACGA CGATGTATGT ACCTGGATAA 180
 TGTCAGTGAA ACAACATATA ATACATTGTT GTTAnGAGCC ATCAGTCATT AAACACTTTA 240
 GGACAAAATT AAACCAAGCA AACGTTAATA TTACACGGGC CTTTGGTGAT GCGCTGGAAG 300
 10 ATnGGCGCCT CGGACGTCCA ATCACCTGGA AAAGGTCCTT GGAACCACTT C 351

(2) INFORMATION FOR SEQ ID NO: 794:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 794:

GGGCGAGGCG TTCGCGCACC GGCCGAGCAG CAAATAGGCC GGGATGTCGC GTCTTGCTGC 60
 25 AGGTCCGAAA AATATCAACT TGAAGAGGTA ACACCGnTAG ATATGTTTCC ACAAACAACA 120
 CATGTTGAGA CAGTGGCATT ATTCAATTG AAATAGCGCA CATGATTGTA GATAAAATTT 180
 30 CGCCTTAATA AGTGAAGAAA GAAGTCGTAT ATTAAAATTT TATTACAGCC AATTTACTTT 240
 CTTGATATGA ACTTTTTTAAA TTAAATGTGA CATTGTATAC TATATTTAAA GAAGAATAAG 300
 AATGTCATGA TCGGGAGGGT TGGTAATGCA TAAAATTGAT TTAACGACAA ATAATTTTCA 360
 35 AATGCGAGGT TTATTATCCT GGCAACCTGG TTATTGCGTT 400

(2) INFORMATION FOR SEQ ID NO: 795:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 407 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 795:

ATGTTCCAGG AACGTATTTT TACAACCGAC AATTAGCATA TGTCATAATG AGTTTTATAA 60
 50 TTGTATTTTT TATTGCATTT TTAATGAATG TTAAATTACT GAGTAATATT AAAGTGCAAA 120
 AAGGTATGAT TATAACTATC GTCTCACTAT TATTACTGAC GTTAGTAATA GGTAAGATA 180
 55 TTAATGGTTC TAAAGTTGG ATAACTTAG GATTTATGAA CTTACAGGCA TCTGAGTTAT 240

TAAGTAAACC AAAATTAATc TTAAGTCCTA TTGTATTAGC ATTAGGTTGT ACGTTTTTAG 360
 TTTTCCTACA AAAAGACGTG GGCAACATTA CTAATATTAA TnATnTT 407

(2) INFORMATION FOR SEQ ID NO: 796:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1053 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 796:

CAGTAGGTAC ACTTGCAGCA TTTGTTGGAT ACTTAGAGTT ATTGTTCTGGG CCTTTACGTC 60
 GTTTAGTCGC ATCATTTCACA ACTTTAACGC AAAGTTTTGC TTCAATGGAC CGTGTATTCC 120
 AATTAATTGA TGAAGATTAT GACATCAAAA ATGGTGTGG TGCTCAACCT ATTGAAATTA 180
 AACAAAGGTCG TATTGATATT GATCATGTTA GTTTTCAATA TAACGATAAC GAAGCTCCAA 240
 TTTTAAAAGA TATTAATTG AGTATTGAAA AAGGAGAAAC AGTTGCTTTC GTAGGTATGA 300
 GTGGTGGTGG TAAATCAACA TTAATTAACCT TAATACCGAG ATTTTACGAT GTAACCTCTG 360
 GGCAATTTT AATAGaTGGT CACAACmTTA AAGaTTTTT AACGGGAAGT TTAAGAAATC 420
 AAATAGGATT GGTGCAaCAG GATAATATTT TATTCTCTGA TACAGTTAAG GAAAATATTT 480
 TaCTTGCTG TCCaACAGCa ACAGATGAAG AAGTAGTTGA AGCGGCgAAA ATGGCTAATG 540
 CACATGACTT TATTATGAAC TTGCCACAGG GATATGACAC TGAAGTAGGT GAACGAGGTG 600
 TTAAATTATC AGGTGGTCAA AAACAAAGAT TATCGATTGC TAGAATATTT TTAAATAATC 660
 CGCCAATTCT TATCTTGGAT GAAGCAACAA GTGCACTTGA TTTAGAAAGT GAATCCATTA 720
 TTCAAGAAGC ATTAGATGTG TTGAGTAAAG ATCGAACGAC ACTTATCGTA GCGCATCGCT 780
 TGTCCACTAT TACACATGCT GACAAAATTG TCGTAATTGA AAATGGACAT ATTGTTGAAA 840
 CAGGTACGCA TCGTGAATTG ATTGCAAAAC AAGGTGCTTA CGAGCATTTA TATAGCATTC 900
 AAAACTTATA AAGTATTAGT TGTTTGACTT CAGTACAATC TTGAAGAGAA AATTTGTAAC 960
 AGGATGGTGG GGTCAATAACA TAGAAAAAGC AGTAAGAGAT TTTCTTAGTT GAAAATAATC 1020
 TThCTGCTTT TTAAATTTA ATTTCGnGAT TCA 1053

(2) INFORMATION FOR SEQ ID NO: 797:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 544 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 797:

5 AAGAGTGA CTCTGAAGTGA AAGAAGGGGA CCGTGTCTGTG TTCCAACAAT ATGCTGGTAC 60
 AGAAGTTAAA CGAGATAATG AAACATATCT GGTATTAAAT GAAGAAGATA TTTTAGCAGT 120
 TATTGAATAA TACAGAAGTT AATTCATAAA TAAATTAAAT AGAACGAAAA TGAAACACAA 180
 10 CTAAACAAAT GGAGGTTTAT CATTATGGT TAAACAATTG AAATTCTCTG AAGATGCACG 240
 TCAAGCAATG TTACGTGGTG TTGACCAACT TGCAATGCA GTTAAAGTAA CGATTGGTCC 300
 TAAAGGACGT AATGTTGTAT TAGATAAAGA GTTTACAGCA CCTTTAATTA CGAATGATGG 360
 15 TGTGACGATT GCyAAAGAAA TCGAATTAGA AGATCCATAT GAAAATATGG GGGCTAAACT 420
 AGTTCAAGAA GTCGCAaATA AGACAAATGA AATTGCTGGT GACGGTACGA CAACTGCAAC 480
 AGTATTAGCT CAAGCAATGA TTCAAGAAGG CTTGAAAAAT GTTACAAGTG GTGCGAACCC 540
 20 AGTT 544

(2) INFORMATION FOR SEQ ID NO: 798:

25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 372 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 798:

CAATTGCATA GATATTGCTG ATAGACGTAC GGCTTTGTTT ATCAACTTCT AATAATCCAC 60
 35 GGTCAGCGAA TTAAACACCT AATTTCGTCT GTGTTTGGAC GACGACCTAC AGTTACTAAT 120
 ACATAATCAG CTCGATTGT TTTCTCTTCG CCTTTAGCTT CATAAGTAAC TTAACTCCG 180
 TTATCTGTTT CTCAGCTGA TTTAGCCATA GCTTCAGTAA CGATTTC AACCTTTTCT 240
 40 TTCATACCTT TTAAACAGG TTGTGTGCAT TTGnTTTTTC GAGGCCACCT AAGATATCTT 300
 TAGCACCTTC AAGGGATGGG GTACTTTCTG nAACCAAAGT TAGCAAATGC TGTACCTAAT 360
 45 nCTGGTCCAA TG 372

(2) INFORMATION FOR SEQ ID NO: 799:

50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 1182 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 799:

5	AAACGACATT TGTTTAATTG GAAGAATTaG CACCATTITT TGAGGCGGGT ATAGaTCAT	60
	TTAAATCGA TGGTATTCTA CAAACGGAAG AATATATTAA TGTGGTAACG GAACAGTATC	120
	GTCAAGCGAT AGATTTGTAC AATGAAGATC CTGAAATCTA TGAAGATGAG AAATTTATGT	180
10	TGATGGATCC AATTGAAGAA ATTCAACCTg ATCATCGACC ATTTGACGAA GGTTCCTTAT	240
	ATAAACAAAC AGTATATTAA GGAGGTTAAT CATGAAGACA ATAGAAGAGA TTAAATCAAC	300
	TCCTAAACA GTTATGAAGA AACCAGAATT ATTAGCACCT GCTGGAAACT TAGAAAAGTT	360
15	AAAAATAGCA GTACATTATG GCGCTGATGC CGTATTTTTA GGTGGTCAAG AATATGGATT	420
	ACgTTCaAT GCTGaTaATT TCaCGATGGA AGAAATAGCT GAAGGTGTTG AATTTGCGAA	480
	CCGTTACGGT GCCAAAATTT ATGTTACGAC AAATATTATT GCACATGATG AGAATATTGA	540
20	AGGTCTAGAA TCATATTTGC GTAATTTGGA AAAGACTGGT GCGACAGGTA TCATTGTTGC	600
	AGATCCTTTA ATTATCGAAA CATGTAAAGA AGTTGCGCCA AAACCTGAAA TTCATTTATC	660
25	TACTCAACAA TCACTTTCTA ATTACAAAGC TGTAATATAT TGGAAAGAAG AAGGATTGGA	720
	TCGTGTTGTA TTAGCACGTG AGACCGGCGC GATGGAAATG CGTGAAATGA AGGAAAAAGT	780
	AGATATTGAA ATCGAAGCAT TTATTCATGG TGCTATGTGT ATCGCCTATT CAGGTAGATG	840
30	TACATTAAGT AATCATATGA CTGCAAGGGA TTCCAACAGA GCGGTTGCT GTCAAAGTTG	900
	CCGTTGGGAT TATGAATTAT TAGAAGTTGA TGATAATGGT GAACTTGATG TTTTTTATAA	960
	TCAAgGTGAA GTTACACCGT TTGCGATGAG TCCTAAAGAT TTAAAATTAA TCGAATCAAT	1020
35	TCCTCAAATG ATGGATATTG GTGTGGACTC ATTAAAAATT GAAGGACGTA TGAAGTCAAT	1080
	TCATTATATT GCAACAGTTG TCTCAGTATA TCGTAAAGTC ATTGATGCGT ATGCGGCAGA	1140
40	TCCTGACACT TTAAGATTAA TCCGGAATGG TTAATAGAGT TA	1182

(2) INFORMATION FOR SEQ ID NO: 800:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 989 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 800:

50	GTATTCTTCC AATAACACCT TTCATTTGGA AACCGTTTAG AAAGAATACA GTTACTTCAG	60
55	TTTGGTTTGC TTTAAAATTC TCTaGTGCTT TGTCTGGAT GTTTTCGtTG cAATCATCTG	120

TTTTCTTTAT CTAACCAATG AACACTCATT TTATTCTTGA ACCATGTCAT TTGTCGTTTT 240
 GCATATTGGC GTGAATGTTG CTTTAAATCA TTGACAGCAT CTTCATAAAT CATTTGTCCG 300
 5 TTAATCACAG GTATTAATTC TTTATATCCA ATAGCTTGCA TACTTTGGCA AGATTCATAG 360
 CCTTGTTCAA CAAGTTGTTG CACTTCTCTA AATAATCCGT GATCCAACAT AATATCAACA 420
 CGTTTATTTA TTCTTGAATA TAATGTTTTA CGCGACATTT CAATCCCTAA TAATAATGTA 480
 10 TCATAATTTT CAGTAAATTG TTGCACTTTC TTGCGATTAC TCAAAAGTTT TTTTGTTTTT 540
 AAATAATATT CAATAGCGCG CAACACTCTT TGGCGGTTGT TAGGGTGAAT ATTTTCTGaC 600
 15 AGAAACCGaC ATCAAATTGA GCTAAATAAT CGTGTAGTTG CTGATTATCT AAATGTTCTA 660
 ATGCAGATAA CTTTTGTTTA ACTATGGATA ATTGTGCAGG TGTAcTGTtT CATCTTCTAA 720
 TTCATAATTA TATATTAATG ATTGAATATA TAAGCCTGTT CCACCTGCTA TGATTGGaAC 780
 20 TTTACCTCTA TTCGtATAT CAGTAATTAA ATCTTCTGCT AATCGCTTGA ATTcATATGC 840
 TGAAATGTA TCATCAGGAT TCAAGATATC AATTAAATGA TGTGGAATAC CATCCATTTc 900
 TTCAGGTGTh ACTTTTGcAG TTCCAATATT CATATGTCTG TAGACTTGCA TAGAGTCACC 960
 25 GCTTATGATT TCACCATTGA TACGCTTCG 989

(2) INFORMATION FOR SEQ ID NO: 801:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 543 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 801:

CGTTAGATAT AGAATTAAAA GATAATATTA AATTTCAAAA CGGTCAAAAA TTGACTGCAG 60
 40 AAAAAGTGAA ATCTAGCCTT GAAAATAGCA TGAAAAAAG CGACTTGGTC AAATATTCAT 120
 TACCAATATC ATCAATTACC GCTAAAGGTC AAAAAGTAC AATTAAAACC AACTCCGCTT 180
 ACCCTGaACT TGTATCTGAA TTAGCTAATC CTTTTATGGC AATTTATGAT ACAGATGCTA 240
 45 AATCAGATGT TAATCAAACCT CCTGTTGGTA CAGGCCCTTA CCAAATAAAA GATTATAAGC 300
 AATCTCGAAA AATATCATTG TCGAATTTTA AGGACTATTG GCAAGGTAAA CCGAAACTTG 360
 ATCATATTAC TGTGACGTAC CAAGAAGACG GCAATAATCG CGTCAGAAAT TTAGAATCTC 420
 50 AAAAAGATGA TTTAATAACT GATGTCCCAG TTAATAAAGT TCAAGACATA GAAAATAATC 480
 AAAATTTAAA AGTGTCAAAA GAATCTGGAT TTAGAACTTC TTTACTTATG TATAATCATA 540

(2) INFORMATION FOR SEQ ID NO: 802:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1139 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 802:

	GCGAATTCGT ACACACATAT ACACAAAGAT AATCATAGTT TTACATTGAA GCACATGAAA	60
15	GATAATTCAT TTAAAGGAAG GTATTATCAA TGAATAAAAA AATGGGATTA TTAGTTATGG	120
	CTTATGGCAC ACCTTATAAA GAAAGTGACA TAGAGCCATA TTATACAGAT ATTAGACATG	180
	GTAACGTCCT ATCTGAAGAA GAACTTCAAG ATTGTAAAGA TAGATATGAA TTTATAGGTG	240
20	GTTTATCACC ATTAGCAGGT ACAACAGATG ACCAGGCTGA TCGCTAGTT TCAGCATTAA	300
	ATAAAGCATA TGCAGATGTT GAATTTAAAC TATACTTAGG ATTAAAACAC ATTTCCACCAT	360
	TTATCGAAGA TCGGGTTGAA CAAATGCACA ATGATGGCAT TACTGAAGCA ATCACGGTAG	420
25	TACTAGCACC ACATTATTCT TCATTTTCAG TAGGATCATA TGACAAACGT GCTGATGAAG	480
	AAGCTGCAAA ATATGGTATT CAACCTTACAC ATGTGAAACA TTATTATGAA CAACCTAAAT	540
30	TTATTGAATA TTGGACGAAT AAAGTCAACG AACATTAGC TCAAATACCG GAAGAGGAAC	600
	ATAAAGACAC GGTATTAGTT GTTTCGGCAC ATAGTTTGCC AAAAGGTTTA ATCGAAAAGA	660
	ATAATGATCC ATATCCACAA GAACTAGAAC ATACTGCGCT TTTAATTAAA GAACAATCTA	720
35	ATATTGAACA TATCGCGATT GGTTGGCAAT CTGAAGGTAA TACAGGTACA CCTTGGTTAG	780
	GGCCAGATGT ACAAGATTTA ACACGTGATT TATATGAAAA ACATCAGTAT AAAAACTTTA	840
	TATATACGCC AGTAGGTTTT GTATGTGAGC ATTTAGAGGT GCTTTATGAC AATGATTATG	900
40	AATGTAAAGT AGTTTGCGAT GATATTGGTG CGAATTATTA TCGTCCAAAA ATGCCGAATA	960
	CACATCCATT ATTTATCGGT GCAATTATTG ATGAAATCAA GTCTATATTT TAATGACGAA	1020
45	AGAAGCGTGA AACGTTGTGA CTAAATCAGT GGCTATTATA GGAGCGGGGA TAACAGGTTT	1080
	ATCAAGTGCA TATTTTTTAA AACAGCAAGA TCCTAATATT GATGTAACCA TCTTTGAAG	1139

(2) INFORMATION FOR SEQ ID NO: 803:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 989 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 803:

5 TATCCnAAAT AnAAATGTGC GCATTTATCA AAACCTTACA TACAATAGAG TTTTCCCTAA 60
 CAGTAAATTA GATATTATTA CACCTGTTGA TATGTCTTCT AATGCCAAAC TGCCAGTTAT 120
 TTTTGGATG CACGGTGGTG GTTATATTGC GGGTGATAAG CAGTATAAAA ACCCATTATT 180
 10 AGCGAAAATT GCTGAACAAG GGTACATTGT TGTGAATGTA AATTATGCAT TGGcGCCACA 240
 ATATAATAT CCCACACCAT TAATTCAAAT GAATCAAGcA ACTCAATTCA TTAAAGAAAA 300
 TAAATGAAT TTACCTATTG ATTTTAATCA AGTAATTATT GGCGGTGAYT CTGCAGGTGC 360
 15 TCAATTAGCT AGCCAATTTA CGGCAATACA GACGAATGAT CGCTTAAGAG AAGCCATGAA 420
 ATTTGATCAG TCATTCAAAC CATCGCAAAT TAAAGGTGCT ATACTATTTG GTGGTTTTTA 480
 TAATATGCAA ACAGTTAGAG AAACGTAGTT TCCAAGAATA CAGTTATTTA TGAAAAGTTA 540
 20 TACTGGCGAA GAAGATTGGG AAAAGAGTTT TAAAAACATT TCACAAATGT CGACAGTAAA 600
 ACAATCGACA AAAAATTATC CaCCAACATT TTTATCTGTT GGAGATAGCG ATCCATTCTGA 660
 AAGTCAAAAT ATAGAATTCA GTAAGAAATT ACAAGAATTG AATGTACCAG TAGATACTTT 720
 25 GTTTTATGAT GGTACGCATC ATTTACATCA TCAGTATCAA TTTCACCTTA ATAAACCTGA 780
 ATCGATAGAT AATATCAAAA AAGTGTTACT TTTCTTAAGT CGTAATACAT CCTCTAGTGG 840
 30 TATTCAAAC GAAGAGAAAC CACAAATAGA AAATCCGAGT AATGAATTAC CGTTAAATCC 900
 TTTAAACTAA TGATAAACAG TAGTAATTTA TTACTTAAGC AACATTTAAG ATTTTCAAAT 960
 TAAAAACGAG AATTTAAAC ATGTGGTGC 989

(2) INFORMATION FOR SEQ ID NO: 804:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 711 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 804:

45 TAAcCCCTGG TTTAATGATT TTGATTACGT GTTTTTATAA TAAAAACATA TCGAACATTG 60
 ACTACGTTAT TAAGCTGCTT TTTGTACAC TTTATAACCA ATAGCTTAAG ATTTAAAACT 120
 50 AATCGGAAAG AACAATGATT CACCAAAAA ATATTTATGT TGCTATTAAA AATCAGTTAA 180
 TACGAATGTT AAAATACGTT TGATTTTCAT TAATAATGAT TCAAGTTTAT TTAAATGAGC 240
 GTTAATGTCA GTCTGTTTTG ATGCACCTTA TAATAAGAC AGATAGTTCA AATTACGTAA 300

AAAGCAACAT TAGCATTAGG AATATTAACT ACAGGTGTGT TTACAGCAGA AAGTCAAAC 420
 GGTACGCGA AAGTAGAACT TGATGAGACA CAACGCAAAT ATTATATCAA TATGCTACAT 480
 5 CAATACTATT CTGAAGAAAG TTTTGAACCA ACAAACATTA GTGTTAAAAG TGAAGATTAC 540
 TATGGCTCTA ACGTTTTTAA CTTTAAACAA CGAAATAAAG CTTTTAAAGT ATTTTACTT 600
 GGTGACGATA AAAATAAATA TAAAGAAAAA ACACATGGCC TTGATGTCTT TGCAGTACCT 660
 10 GAATTAATAG ATATAAAAGG TGGCATATAT AGCGTTGGCG GTATAACAAA G 711

(2) INFORMATION FOR SEQ ID NO: 805:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 680 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 805:

ATCAGGAAAA ACAGaATAAT GTAAATCAAG CTGTTCAAGC TCAAATAAT ACTAATGAAA 60
 25 CATCAAAAGT ACCGGCTAAT TTTGTCAAAT TGAATGATAT TAAACCAGGT GATACTTCTA 120
 TACAAGGAAC AACTTTACCA AATCAATTTA TACTATTAAC TATTGATAAA AAAGATGTGA 180
 GCTCAGTTGA AGATTCTGAC AGCAGCTTTG TTATGTCTGA TAAAGATGGG AATTTTAAGT 240
 30 ATGACTTAAA TGGTCGCAA ATTGTTTATA ATCAAGAAAT TGAAGTGTCT TCATCAGATC 300
 CCTATTTAGG TGACGATGAA GAAGATGAAG AAGTAGAAGA AACTTCAACT GAAGAAGTTG 360
 GTGCTGAGGA AGAAAGTACA GAAGCTAAAG CTACATATAC AACACGCGA TATGAAAAAG 420
 35 CGTATGAAAT ACCGAAAGAA CAGCTAAAAG AAAAAGATGG ACATCACCAA GTTTTATCG 480
 AACCTATTAC TGAAGGTTCA GGTATTATTA AAGGCCATAC CTCTGTAAA GGTAAAGTTG 540
 40 CTCTATCTAT TAATaATAAA TTwATTAAT TTAGAGaCAA TGCTatGGTG GtCCaAATaa 600
 AGAAGaAGCG AAATCTGGAT CAGAAGGAAT CTGGATGCCT ATTGATGACC AAGGATACTT 660
 TAATTTTGAC TTCCAAACGA 680

(2) INFORMATION FOR SEQ ID NO: 806:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 950 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

GTATTTTCATT AGCCATTGGC AATTGACATC TGACAATGAG GAATGGCTTT TGCATTGGAA 60
 TTCACAGTTG GAGTGCATTT ACTGGTTATT TTGGAGGTCA TTGTTGATAC ATTATTAATG 120
 5 GAGAATAACC GAATTTGTGA TGTATTTCCT ATTTTAAATA TTTGCAATTG TATTAAATGC 180
 TGCACTTGGA GATAAAATTA AAAATCCTTA TGGATCTGCC ATAATTCTTG TTCTAGTTAT 240
 TATCGTATTA AGTTGGGGAG GTATTGACAA GACTTGTTCTG TGGTAAAGTA CTTCAAGAAA 300
 10 AAGAAAATGA ATACTTTTTG GCAGCAAAAT CAATTGGTAC ACCCACATAT AAAATTATTT 360
 TGAAACATCT TTTGCCGAAT ATATTAAGTG TAGTTATCGT ACAAGCAACA TTGTTATTTG 420
 CCGGTATGAT TGTAGTGGAA TCAGGTTTGA GCTTTTTAGG ATTCGGAATT AGTAAAGCAA 480
 15 TACCATCTTG GGGTAATATG TTGAGTGATG CTCAAGAAGG GGATGTTATA AGTGGTAAAC 540
 CGTGGATATG GATGCCACCT GCTATAATGA TTACATTAAC TATATTAAGT ATAAACTTTG 600
 20 TAGGGGAAGG GATTAAAGAT GCTTTTAATC CTAGAGGTAG ACGTTAAATA ATAAAAGAGG 660
 CACTAGTTAA TTCTAGTACC TCTTTATTTT ATCTCTTACG TCCTAAACCC ATCGCTTTTT 720
 CCATTTTTTT GACAGTTTGA AATGAAACTT TGTGTGCTyT ATCTCTACCT TGATCTAAAA 780
 25 TATCAyCAAG TTTATCTGAG TTATAGAAAC TTTCGTATTT TTCTTGGAAT TCTACTAAAA 840
 ATGCTTTAAC TATTTAGCA AGGTCACCTT TAAATTACC ATAACCTTCG CCCTCATATT 900
 TTGCCTCAAT ATCTTTAATT GGCATGTCTG TTAATCCAGC GTATATTGAA 950

(2) INFORMATION FOR SEQ ID NO: 807:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 418 base pairs
 (B) TYPE: nucleic acid
 35 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 807:

GTTACCAGTC GAAGCTTTAC GACCTGTTAC GAAACATTGT TTACCCATAT GAGTACCTCC 60
 TTTAATAAAT ATAAATACAC ATAACACTTT ATATACTTAA TTAAGATAGC ATAGTTTCAT 120
 45 TTGAAAAACA ATGAATAATT TTCACATAAA AGTCAAAAAT ACTGAGTTTT GTGATATAAT 180
 TGTAGACTGT GAAGTTATGT AGTATGATAT TTTAGAGAAA TAAGTGAATG AAACATTTAA 240
 AATTTTTTATT TrATGATACT ACATCTATTA AAAGAAAACG CCTATAGATA ATCGTCaTGA 300
 50 GTGTAAATTC AGTTtACTCa AcAtATAaTA GGkGaTTTAA gCgTAAGtCa TTCTGATAAG 360
 TTGTACCATT GATATTTTAT GAAATanTCh ATGAACTTAA AGCGTTTATG CTACACTA 418

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 842 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 808:

10	AATGGCnATT AATCTTTAAT ACGATGCTTG AGGATTTTTC CTAATAAAAC CTTGATTTCm	60
	AAAAGGGTTT AAATCmAATG AAACAATAAT AAaAAAATGw CGCAATATAA TAATAAGTAC	120
15	AAATTTAATT AAGAAATTAA ATTGATTGTA TATGTATATT TTGGTAACGT AAAAGAGAnA	180
	TATACAAAAT AATTAATTAT TTATATGAAA AGAGAATATA AATGAAGTAT AAAACAGAGA	240
	GACGTGAAGC GATGGGATAT TTAAmAAGGT TTGCATTGTA CATAAGCGTT ATGAyTTTAA	300
20	TATTTGCGAT AGCAGGTTGT GGCAAAGGTA ATGAAACAAA AGAAGATTCA AAGGAAGAAC	360
	AAATCAAAAA GAGCTTTGCG AAAACATTAG ATATGTATCC AATTAAGAAT CTCGAGGACT	420
	TATACGACAA AGAAGGATAC CGAGATGGCG AATTTAAAAA GGGTGATAAA GGGATGTGGA	480
25	CGATATATAC AGATTTCGCC AAAAGTAATA AACAAGGTGG ATTGAGTAAT GAAGGTATGG	540
	TCTTATACTT AGATAGAAAT ACACGGACTG CAAAGGGACA TTATTTTGTT AAGACATTCT	600
	ATAATAAGGG CAAATTCCCA GATAGAAAAA ATTATAAAGT TGAAATGAAA AATAATAAAA	660
30	TTATCTTATT AGATAAAGTA GAAGATACAA ATCTAAAAA GAGAATAGAA AACTTTAAAT	720
	TTTTTGACA ATATGCAAAC CTTAAAGAAT TGAAAACTA CAACAATGGT GaTGTCyCAA	780
	TTAATGAGAA TGTTCCAAGT TATGACGCAA AATTTAAAT GAGCAATAAA GATGAAAATG	840
35	TT	842

(2) INFORMATION FOR SEQ ID NO: 809:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 451 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 809:

	TAAGACTATG CCATCTTGGC AACGCGTTGT CGCATATTCA TTATTAGTAA GTATATGCAA	60
50	GCATGATTTT GCCATAActT TACctCtTTC TATATTTAAG TACCACTTTT ATCATTCCCT	120
	ATAATATTTA ACTTATTTAA TTAAACGTAA ATTTAACACA ATACGAATAC CAAATCAAAA	180

AAAAATAGAT GTAGTCAGTT TAATTAACT ATCCAATTGA AAACACACTA CTTTTTAGTA 300
 TTTTCAAAT AATTTTAAAT GACCACATCT ACAACGTATT ACTATTATCT TTTGTTAGTT 360
 5 ATATATTCAT TTTCAATTTA TAAATAAACA CTTATTTAA TCACATTCTA CTTTTGAGAT 420
 GAGCTCAAAC TAACATTAAA TTGTTTATAT T 451

(2) INFORMATION FOR SEQ ID NO: 810:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 1499 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 810:

ACATTTTGTG CTTGTTGTCC AATCCAATTT CTACTTTGTT GAACAGTATG AGTTGCTTGA 60
 CCACGCATGT TACTCAGCAT TTGTCCAACA TGAGTATTTT GAGCAAAGTT ACGAGATTGA 120
 TTCAACACAC TGTTTTTCAT CATTnCCATT TTAGGTGAAA TACGACTAAC TGCTTGTTGC 180
 25 ATTGTCITTT GCAATCCTGT TTTAACTGCA AATTTTCTC CGCCTTTGAA GCCTAATTTTC 240
 ATTAAACTTT TCCCAGCACC TTTGAGGAAG CCCATACCTG GCAATGGAAT AAGCGAAAGT 300
 CCTTCCATGA TTCGTTCTTC TTTAGATAGC TTTCTTCCAG TTACAATATT TTTTCTGTG 360
 30 GCTGCATTTG CTGCTGAATA AGCGGAATAA GCACCAATAG CTACTGCTCC AGCAACAGGA 420
 TTAATACAAG ATAAACTAC CATACCAGCT AGTGCTGCAA TCTCTATAGC TTCTTCTTTT 480
 TTCTTTTGCT CCTCTAGcTC TTCCGCTTCA GCTACTGTCA TGTAATCACA AGAAGCGCCC 540
 35 TGAGTCATCA TTTTTTCAAA ATCACTTTTA GATAATTTCT TATCTTCTTT TTTCAATTTCT 600
 TTGTAATGCT GATCAATTAC TTTTACAAAT TCTTGATCCG ATTTTAATAT TTCATCGATG 660
 40 CTATAAACAT CGCTGTCAC TTTCTTGGCA TCTCCCTTTG CAATTTTCCC AGAAGCCCCA 720
 TAGGTATCTC TACCATGTCC ACCACCATTT TTAATTAGTA TATTTTCCAA TTTAACATTG 780
 GTTATACCTT TGAATGCTTT ATCTATATCT TCTATAAATG GCGTGTCAAT AATTTCTTTC 840
 45 ATTTTCGAAT CTAATTGAGA TGCATAATCA TATAACTCa TTTGATAATA CCCCATTAAT 900
 TTAGATCCTT GTGGACCTAC TACACTACTT GTTAATGATA TTGCGCCATC TTCGTCTAAA 960
 GAACTGACAT CGCTTACCGC ATCATCCATT GTTGATCTA CATCTAAGAA GTCTTGACCC 1020
 50 TcTATTGCAT CTATTACACT TTGGATAGAT GACTTTTCAT TGTCATAATC AGCTGTTAGA 1080
 TATTCAATAT CTTTTGTCAT GTCATGCACC TATCCCTCAA TATTATAGTA AAGCTTGGCA 1140

CCACCGAGTG TACTCAATGG ACCTTTGAGA CCACTAATGA CTGTTGCAGC ACTACTATAG 1260
 CCATTTTCCA TAGAATGTGC AGCTTTTTC A TACTGTAGT AATTTAATTG CGCTATTTTT 1320
 5 CCAAAGTTTT GAGCTATTTT ATCATACTTT TGACTTATGC TTTCCAATTC TTTTACAACA 1380
 TGTGCAATCG TTTGAGCTTT AACACTAATT TTTCCACTCA ACGTCATTAC TCCTCtGcTt 1440
 TATcAATATG ATTTTcATCA GTATCGAATC CAAATAATTC TCGTGATAAA nGTATTGAA 1499

(2) INFORMATION FOR SEQ ID NO: 811:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 620 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 811:

CnCGCTGCAC CGAAGAATGC TTTTGGTTTG TGTAAGATG CAGGATCTAA ACCACCTGAT 60
 AATGTACGAC CACTTGGTGG AATAACYAAG TTATAAGCGC GTGCTAATCT CGTTATAGAA 120
 25 TCCATTAAAA TAATGACATC TTCCCCAATT TCTACTAAAC GCTTGCACG TTCAAGTAAT 180
 AATTCAGCTA CTTTAACATG GTGTTCTGGT GGTTCTGCAA ACGTTGAATG AACGACTTCA 240
 GCAGCTTCTA CTGAGCGTTC TAAATCTGTT ACCTCTTCAG GACGCTCGCC AACTAACAAA 300
 30 ATAAATAGCT TTGCATCTGG TTTGTTTCGTA CTGATTGCAT TCGCTATTTT TTTTAATAAC 360
 GATGTTTTTAC CTGCTTTAGG TGGCGCCACT ATTAAACCAC GTTGACCTAA ACCAATCGGT 420
 GTTACTAAAT CCATGATGCG CGTTGAATAA TTTTGTATTT CTGTCTCTAA TTTAATACGC 480
 35 TCATCTGGAT AAAGTGGTGT CAAAGCTTGG AAATGCGGAC GTTCTCTCAC TTCTTCTGCG 540
 TTATGGTCAT GACAAAGTCA ACTTGTAATA AGCCATAATA TTTTTCGTTA TCTTTAGGTT 600
 TTCTAACTTT CCCAGTTACT 620

(2) INFORMATION FOR SEQ ID NO: 812:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1094 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 812:

CCGGCTGAAA TTAAGTTCTT GTTATATTTT GCAAAAATGA CAAAGAAAGA TAAAAATAAA 60

TGAAC TATTT GCAATTAGAG AATTGTTAGA GAAAGGTTTG ATTGGTGATT GTATTCAACC 180
 TATAATTGAA CCAATTAAAT ATACAACCAC ATTTAAAAAT ACTTTGCAAT ACTGTGGTGA 240
 5 AAAAGCATT C TCTATAAATT TAGTAGTAAA TTCAAAGTTA ACTGAAGAAG AGATTAGTAA 300
 CGAAaCTGTT GCACATTTAA CTGAAATAAT AACAAAAAAC AAAAGTGTTA TTCAAAAAGC 360
 10 TTACTTGGGT CCTTCTGATG AAGGCAATGA TAGGTTGAAA CAGCAATTTT CAAGTAATAG 420
 TTTAGCTATT TTAACAAGTG TAGATGATTG GGAAATGTTT GGAGATAAAA ATAACTTGA 480
 AATGGTTTTT GTACCAGATG ATAGACACAT TAAACGTAAA TTGCGTAATA TTCCAAACAA 540
 15 AGGCATsATT ATGGATCCTT TTAATAAACT AAGTCGTAAT GTTGATTATT TAGATAATGA 600
 TGACGAGTTT TATAGCGACG ATCACCTTTA TTATAAGGAA GATGGATACG TAGCATTTC 660
 AGACTATTCT GTTATAGGTG GAGAATATGT AGACGGTGGC TTTTCGCCAT TAGCtATTGc 720
 20 GtTACATATT GTCTATTTTG ATGAGGCTAA TGAGCTAAGA GTTAAGCATT TtGTCTCTGa 780
 TTCTAATAAT GATAGATCAA ATCCAGGTAA AAnGTTTTTT GAGGCTGTAG ATAAATTAGT 840
 AACATGGTCA AAAAaCTTAG ATATTAaaaa TAGATCTTAT GCGCTTGGAC AATTtGAAGA 900
 25 ATTAAATGAA AATAATAAGT ATCCAGGATT AGGTTTAATT AAAnGTTATC TATCAGCATC 960
 ACCTAGAAAT TATGAATAGA TACTGGGTCT CAAAGAAATA GGAAAGTTT ATATCGAACT 1020
 30 GAACTGCAAG AATGCATTGA CATGGATGAA CACACGGGTA AAATGATCGC AGCTGAAATG 1080
 ACTATGGTAT TAGC 1094

(2) INFORMATION FOR SEQ ID NO: 813:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 930 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 813:

CACCTATCAT CGTCTCTTTA ATTCTATCTA TCTATTTACC CCAATCGTAA ATATGATGGA 60
 45 CGTTATAGAA TACCAAGAGT TGCAGGTATn TCTATTATTT ATCTAGCTGT AGTAGGTGTT 120
 ATTACGTAA TTGTTAATTT ATTGATACCT ATTATTGGTT CGCAAGTAGA TAGTTTAGTT 180
 50 AAAAATTCAC CGCAATATCT AGAAAAATTA ATTAATTCTA TTGATAAAAT AGCAAATAAT 240
 ACGTTTTTCT CTTCGTATTA TAGTCAAATT AATGATTGGT TAAATTCTTT ACCTAAGAAA 300
 ATACCATCTA TGTTAAGTGA ATTTACAGAT GGCTTTGGGT CTAAAATTGC AACGTTTGCA 360
 55

CTTAAAGATG GACATCACTT CAAAGAATTT TCAACGAATA TTATGCCACC GAAATTCCGA 480
 AAAGATTTTC ATGATCTACT TGAAAAAATG AGTGTTC AAG TTGGTTCATA CATTCAAGGA 540
 5 CAAATTATCG TTTCATTCTG TATCGGTATA CTGTTGTTTA TCGGTATTTC GGTATTCGGG 600
 TTGAAATATA GCTTAGTATT AGCTAGTATT GCGGCAGTTA CAAGTGTGT ACCATATTTA 660
 10 GGGCCTACTA TAGCGATTTC TcCAGCTATT GTAATnGCTG CTATAACAYC GCCGTGGATG 720
 CTCTTAAAAT TAGCAGTAGT ATGGACTTTA GTACAATTTG TTGAAGGGCA CTTCAATTCA 780
 CCAAATATCA TGGGTAAAC ACTTAAGATT CATCCACTTA CAATCATTTT CATTTTACTG 840
 15 TGTGCAGGCA AATTGCTTGG TATTGTAGGC GTTATTTTAG GTATTCCGGG ATATGCTATT 900
 TTAAAAGTAT TtAGTTACTC ATTTATTCCA 930

(2) INFORMATION FOR SEQ ID NO: 814:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 814:

GTATGATTGC TGTTTTAATA CCAGATGATG GCAGTGGCAA ATCTTATGAC TATATGCTTG 60
 TGAACCCAAA AATTGTAAGT CATAGCGTTC AAGAAGCTTA TTTACCAACT GGTGAAGGTT 120
 GCCTTAGTGT CGATGATAAT GTTGCTGGTC TAGTTCACCG TCATAATAGA ATTACAATTA 180
 35 AAGCCAAAGA CATCGAAGGT AATGATATAC AATTACGACT AAmAGGATAT CCAGCAATTG 240
 TTTTCCAACA TGAAATTGAC CATTTAAATG GTGTAATGTT CTATGATCAC ATTGACAAAG 300
 ATCACCATT ACAACCACAT ACAGATGCAG TAGAAGTTaA aACACATTTT cTAATTATCA 360
 40 AAgCTTAGGA TAAtATGATG tCCTAAGCTT TcCTTTACAA CTTTTCGGAT AACCAACAGT 420
 TAATATATCA CCTTCTAACC AAACTTTTAA TCCCTCATT A 461

(2) INFORMATION FOR SEQ ID NO: 815:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 573 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 815:

AACGATATAA TAGAATTGAA TAAAGTGGGT GATAATGTGA CTAAAAATGA GATTAGAAAA 120
 TACATTTTAC ATAAAAATGAA GAATTTTAAT AAAGCTGAAA AGCGAAAAGC AGACACATGG 180
 5 TTAAGAAATC AATTTTTTGC AACTGAAGAA TACAAAGAAG CAAACGCAAT TGCGCTAGTT 240
 CTTTCTTTTA ATCATGAAGT AGATACTTTT TCTATTATTG AACAAGCCTT AATGGATCAT 300
 AAACGTATTT TTGTACCGAA AATGGATTAT TTAAATCATC AAATGACTTT TAAAGAGATA 360
 10 TTTAATCTCA AAGATATTGA TGTCGATAAT AAGGGGATTT ACTATCCAAC TTCAAAAGGT 420
 GAAACAACGA ATAACCTAGA TTAAATTGTT GTTCCTGGTG TTGGATTTCA AGACGATGGA 480
 15 TATAGAATTG GGTATGGTGG TGGCTATTAC GACAGGTTTT TAGCTAATTA TCAGACAAAG 540
 ACAATAAGCT TATTATACGA TTTTCAAATA ACA 573

(2) INFORMATION FOR SEQ ID NO: 816:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 3989 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 816:

TAGTTTAAACA ATGTCTATTC TCATAGAATT TGTCCAAC TAATGTAGACG ATTCACTAAA 60
 30 CTCTAAAAA AATAAACCCC AAATTATAAT AGTCTCAATA TTAATATATT ACAATTTATT 120
 CATAGGATTT TTATCATTTT AATTAATAGG TTGTTATCAG GGTAAATAA ACATTTTTTG 180
 35 TAATAGTCCT TTTTACGTT CTTTAAATAA CTCAATTCTA TTCATTTGAT TATTCATTTT 240
 ATTGTCTATA GATTTTAAACA ATGCACCTTAC TTTATCTGT TCAGTGAGAC AAGGTATTTT 300
 AAGATTTATA TTGCATAAGT TCGCATGAGT TAATTTAGCT GGTGCATTAC CTGTGACAAA 360
 40 TGCTCGTAGT TCTTTAAAAT TTAAATAATA ATTCATAAAA AACAAATTAT GATCATTACT 420
 TTAACTACA TCGCATGAT TATTTACCCA GTATTGCCCA TTAGCAATAA AGCTACTCGT 480
 CTCAAAGTGC CCCCATTTTG CACCATCTTC TCCTATTAGT AATCGTTCTT CATTATTGAA 540
 45 TAAATAATCT TTTACGTAAT CAATAATTCC AGTTGCACCA TAGTAAGGGT ATAACCCCTT 600
 TTCTCTTAAT GAAGAAGTAA TTGGTTTTCT TCTATTATT TCAAAGATAA AGATGTCTTT 660
 TATGAATTTG TTTCCCACT CTGGATATT TCACCATTC TCATCTTGA ATCGCAATTC 720
 50 TTGTGTGAAG ATTTCTGCA TATAGCCTTT TTTCTGTTGT TGAAGCAATT CAAGTTTTTG 780
 TTCTTCTAAT TCAATTGTC GGTGAGTTT GCTGAAGAAC TTGCCTATT TTTGCTGTTT 840

	TCGACTACCT	CCACTTTGTG	CAAGGAAAAT	TTTCCTTTTA	CCTTTTCTTG	ATAATAGATA	960
	CTGTCCAAAA	AAATTATAAT	AATACTCTTT	TTTCAATCTA	ATAATACATA	CATGTTGATT	1020
5	TAAATTAGCA	TGCGTTTCAA	CTATCGAATT	AATGGCTGTT	CTACCTATTG	ATGCTCCTGT	1080
	AATATTTAAA	AGAACATCAC	CATAGTACGT	TCTACTATTT	TTCATCTCAT	CATCTATATC	1140
	TTTACTAATA	TAAACTAAGT	CATTAAGATT	TAATTTACCA	TTTCTAATAT	TTTGACTCCT	1200
10	TAAAAATGGT	ATGCCTTTGT	TTGTATAGTT	TTCACTTCCA	CCTTTGGGAG	TCTTTCCACT	1260
	ACCTATTTTG	GTAGTAAGAT	TCCCTAACTT	CTTCTCTTCC	CATTGCGCTT	CAAACTCTGG	1320
15	GAATCTCAAC	TCTGGCACAT	TTTTCGTTTG	TGTATTACTC	ATCTTTCAAC	ACCCCAAGTT	1380
	CTTTCAGGTA	TGCATTGATT	TCTTGTTCAA	TTTCTGCGAT	TTCTTTGTCTG	ATATTTTTC	1440
	AATCTTGTG	GACTTGATCT	AAATCAATTG	GTGCTTCTTC	TTCGAATGTA	TCAACATATC	1500
20	GCGGTATGTT	TAAGTTGTAA	TCGTTATCGG	CGATCTCTTG	TAATGTCGCG	CTGTAGCTAT	1560
<hr/>							
	ATTTATCAAT	CGTTGCTTTA	CGCTTATATG	TGTCTATAAT	ACGTTGCACT	TGGGCATCGC	1620
	TTAAATGGTT	TTGATTTTTT	CCTTTTTC	AATCATGGA	TGCATCGATA	AATAGTACGT	1680
25	TGTCGTCTTG	TTGGCGACAT	TTTTTAAATA	CTAAAATACA	TGTTGGAATA	CTTGTCCTCAT	1740
	AGAAAATATT	GGCTGGTAAC	CCAATCACGG	CTTCTAAGTA	GTTCTTTTCT	TCTATTAAAT	1800
	AGCGACGAAT	CACACCTTCT	GCGGCACCAC	GGAATAATAC	ACCATGTGGG	AGTACGACTG	1860
30	CCATGGTACC	TTCATCGTCT	AGGTAATGTA	CCATGTGTTG	AATAAAGGCA	AAGTCTGCTT	1920
	TGGaTTTTGG	CGCAAGCTTG	CCGTAACCAC	TGAATCGTTC	ATCATTTTCA	AATTTTGAAT	1980
35	CTGCTGTCCA	TTTCGCACTG	TATGGTGGGT	TCGCAATAAC	CGCATCAAAT	GTATTGCCTA	2040
	AAAAGGCTGG	ATTTTCCAAT	GTGTCATCAT	TACGGATCTC	GAAGTTCTCA	TAACGCACAT	2100
	CATGTAATAA	CATATTCATG	CGTGCTAAGT	TGTATGTAGT	ATTGTTACGT	TCTTGTCCGA	2160
40	AATAACGATA	CACTTGCGTT	TCTTTACCAA	CACGTAACAA	CAATGAACCG	GAACCACATG	2220
	TTGGGTGCGTA	CACGTGACGT	AATTTATCTT	TACCGTCTGT	GACAATCTTC	GCCAGTATCT	2280
	TAGATACTTG	TTGTGGTGTA	TAGAACTCGC	CTGCTTTTTT	ACCCGCTGTC	GCCGCAAAGC	2340
45	GCCCGATTAG	GAATTCATAT	GCATCACCTA	ACATATCAAT	TTCCATGTCA	CTGTGAACGA	2400
	ATGGTAAGTC	GTCAAGATTA	ACCATGACTT	TAGAGATTAA	AGCAGTACGT	TCTTTGACAT	2460
50	TGTTACCTAG	TCGCGTTGAA	CTCAAATCCA	TATCGCTGAA	CAGCCCGATA	AAGTCATTTT	2520
	CACTTTCTTC	ACCTAATGTA	GATGTTTCAA	CTTTGCGAAT	CGCCGTCGCT	AGATGTTCTA	2580
	TATCGAAATC	TTGCGTTTCA	ATTTACGAA	TCATCGCACT	GAATAAATCT	TGTGGCTCAA	2640

55

EP 0 786 519 A2

	CCCATGCTTC TTGATACGTG ATGTCTTCAC CTGACAAGGC ATCTGCATAT TCTTGTTCCGG	2760
	CTTTTTTCAGA TAAGAAGCGA TAGAAAATCA AGCCTAAAAT GTAATTACGG AATTCACCTCG	2820
5	CATCCATGTT CCTCTTAAA TCATTGCGAA TCGACCATAA TTTTATATGT AATTCAGCTT	2880
	GTTGCTGACG TTGTTTTTCA GTAATAGACA TGTGATTCTT CCGCCTTTGC ATAAGTAATT	2940
	TATCTCTTTG TGTAATAGAT TTATTATAAC ATTTGGTTAT GTTGCGATGT TGATAATTTG	3000
10	GATGTTGGTG GTGGAAATTT TGAGTTTTAG TGGCGCAATT GTTATTGAAA AATTTTATAG	3060
	AAATGTTGTA GCTTTCAAAT GCTTTCAAAA TCATTTATAT TCTTAATGAT GTCAAAAAGT	3120
15	TGTTCAATTCA TACATAAATA AAACCAATCA ACAATTGAGT TGGTGAAAAT CAATCGTTGA	3180
	TTGGCTTTGA TGCATATTAA ATAATGCAAT ATATATTAAT AAATGTTAGT TATAGTATAT	3240
	TTTGTCAGGA TTGGGTGAAT GTCTAAGTTT TAATTATTTA TCTAAATTAT CTGCAATGAA	3300
20	TTTCTTAATT TCAGGAGAGA AATAAACAGC AAATCCTCTT GTGCTTTCAC CTGATGGCTT	3360
	ATTACCGGCA TAGATTACAC CAATAGCTTC GTGTTTACTA TTAAATATAG GTGAACCAGA	3420
	GCTACCAGGC TGAATAATTG CATCCGATGA CACTATATTC CCATTCCTG ATAATACTTT	3480
25	ACCAGTTGAT TCATACATTT GTAGTTTATT TCCATTAGGA TTTGGATAAC CAATGACTGA	3540
	TATAGGTTCA TTTTCTTTAG CTTCTGATGC TATATTAAAT TTACTAGTGA AATCTTTGAA	3600
	TTTTCTACCT TTTGGTTGTG TTGATTTTTT TCAACTTGT ACAACCGCAA TATCTTCTTT	3660
30	ACCAGGATAA TCTACAATCT TAGTAACTTT ATAAAGTCCA CCACCGTTAT TATAAAAACC	3720
	ATTAGGATGT GCTTTGATTT CATCACCGAC TTTCATGTGA TAGGTAACAT GTTTATTGGT	3780
35	AATGATTGTA TGATTTCCAA CTACAAATCC TGTTCAGCG CCCATCCATG TAACACCACT	3840
	GTATGGTGCA ACATTTGTAT TTGTAATTTG TTAAACAGTA TTTTCGGCTT TGGCTGTTTG	3900
	TTGAATACCT TCAACCATTG TTGTGCCGAC ACCAGTTATT GATGTTAAAA TCGTCAATGC	3960
40	TGCAATACTT TTGATGATTA TATTTTTAT	3989

(2) INFORMATION FOR SEQ ID NO: 817:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 904 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 817:

CGTTGAGCAC AGTTTTAGAT AATAGATAAT CTTGCTCTAG TTGTTGCAAT GTCTGCGATT 60

	TATGCGTGTA ACGTTCAGTT ATCGTTTCTA AGGTATACTG AGATGTATTT AATTGATATC	180
	CTTTAGATTT AATACTTACG ATGATATCAT CCATAAAATT GCTATTGATA ACATGGATAT	240
5	CATTGCGAAC TGTGCGGTTT GAAACATTGA CATGTTTAGC AATTTTCTTA GAACTAATGT	300
	GCTTTGATGG ATTTTAAATA AAAAAGTGA GTAGTTTAA GTGTCTATCA AGCATTTAAC	360
	ATGTACCTCC TTTCTAAATT TTTCGTGTAA GCGTTTAA GGGTGTATTA ATATTATTAA	420
10	ACATGAGAGC TTATACATAC GTCAATGACA TTAAAGCGAA CTTTATATG ATTTTAACAG	480
	AGTGCGAATT ATGCAATAA AGAACAGCAG TAAGATATTT CAAATAGAAA AATATCTCAC	540
15	TGCTGTTTTT CTGAATTTAT GCATCTGGTA CTTGTGGACG TATCAGGCAA ATGATTAATT	600
	TTTAGGTGAT TGTGCTTGAG GTGTTTGTTT AGAAGGCGTA TTGGTATTAT TTGATTATT	660
	AGCAGGTGGT GTGTTCTGTT GTTGATTATT TTGGTTGTTT GTTGACGATT GACTGCCACC	720
20	ACCGTGAGTA TTATTTTAT TTGAATTTGA GTCTTTTGGC TGAGCTGGTT GCGTATTCTGA	780
	TTGGTACTGTT GAATGGTTGT TAGGAACATT TGACGGTGAA GATGGTTGAT TGTCATTAGT	840
	AACGTTATTG CCATTATTTT GATTCTTATC TGTTTGTCT GCACTATCAT CTTGTTGATC	900
25	ATTT	904

(2) INFORMATION FOR SEQ ID NO: 818:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1104 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 818:

	TTTAACatGa TAATAAAAAA TCTTTTGTTA TATCATTAGG AATATTTGAT GAACTTGATA	60
40	TTAAGGTTAC ATTTTGAGAA ATGGACTTAG GGATATTTCC ACTATTATTT AGTAAGAAAT	120
	CTTTAGCTAA TAAAGATTTT CCTACACCAT TTTTACCAAC AATGTGATTG ATCTGACCAA	180
	GATAGAAATT TAAATCACAA TTGTCAACTA GTTGTGTTT TTTAACTTTT AAAGAATAGT	240
45	TATTTAGTTT CATGTATACA ACTCCTATGT ATAAAGGGAT TTATTACACC GATATTTAAT	300
	TGTATTTTAA AAAATTCtTT CACATTATGT ATAGAwGTTA TAAATTAGTA TATCaCACTA	360
	TATTTtGkCT AAATGATAAA TATATCGTTA TATTTTACAA ATATTCTGAA ATTTATGTTT	420
50	GCCTCTGAAT GCTATATCCA GTGTAATGTG TTTTGCATAT ATGAAAGCAA TTTCAAAATG	480
	TGAATATAGG TTCATTGTGG TATGACAAAC TTCATTGCTT GTCATGAGAT GGATATAATG	540

	GACGGGACGT TTTTAGATTC AAAAAAGACA TATGATAAAC TTAGATTGGA AGCGATTTTT	660
	ACTGAACCTA GAAATAGAGA TATTACATTT ATTGCTGCGA GTGGCAATCA ATATGCGAAG	720
5	TTGAAGTCTA TTTTCGGGGA TAGAGATATG TATTTTATTT CTGAAAATGG TGCAGTTATT	780
	TATAATGGCA ATGAGTTATA TAATTATAAA AGCTTTAATC GTCAGGTGTT TCAACAGGTT	840
	GTCGATTACT TAAATATGAA GCAAAGTATT GATCAACTCG TCATCTGTGG TTTGAAAAGC	900
10	GCGTATATTT TAAACATAC TTCTGAAGCG TTTAAAGAAG ATACGAGATT TTATTATCAT	960
	CAGTTAAAAG AAATTGACAG TCTACAGCAA TTACCTGAGG ATGATTATGT CAAAATAGCA	1020
15	TTTAATATTA ATCGTGAGAC GCATCCGAAT GTTGACGAAG AAGTAGCAAC GCAATTCAGC	1080
	AATGATATTA AACTTGTCTC AAGT	1104

(2) INFORMATION FOR SEQ ID NO: 819:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 1425 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 819:

	CCCTTTTAC GGATTAAngG CTTTTTCCTA TTTAAACCT ACGGCATTTT CTTTTCAACC	60
30	ACGGCGGCTC CCATATGGAT GGTATnGGGA TTGGGGTTTA TAAAATGGGG ATTGGAAATG	120
	GTCCATCCTA AATACTCAGT TTAGTGCTTA TTTCTTTAG TGCTGACGAA TAAATATGAT	180
35	CTAACTCTAC GAAACCTAAT AACGTATCAA ATGCTTCATC ACCATTTTCA AATTACTTA	240
	AACTATTTTT AAAATCATGT CGCAAATCCT CTAAATATAG TGATGGTTTT CGATCTACAT	300
	ACATTTTTAT ACTAACCTCC GATATATAAT CATCTTTATT GTACCTAACA TTTTATTAAG	360
40	ATAATACTAA TACACTATCG AACTTTGGGC TGATACTGAA ACAGCACAAA GAAACTCAAA	420
	CAATTCGAAT TATGTATCAA AACCTTCAAT TACAGGAAGT GATTTTAAAA TGATTAAACG	480
	CAAAAAACA CCTGTTACCG TTATATAGGT ACAAGTGCTT AATTGATAGA GATGTTATAC	540
45	GTCTTTAAAT GATTCCACAA CTTTTGGATG TGGACCATCC ATAAGCGGTT CTCTTTGTCG	600
	AACGCCACCA CTTTGGTTGC CAATTGATTC GCTATCAAAG TACGATTTAT CTTGATTGTA	660
50	TTGTTCTTGA ATATGTTCTT CATTATCAGT TGTTGCATAT TCACTATCCA CCTCTGTTTT	720
	TTCCATTGTT GCTGTATGGA ATTGTACGAA GTTCTCTTCT TCTAATGCTT TGATTCTTTC	780
55	TTTCGATAAC GCTCGATACC AATCTTTCGC TTTTTTCGCC GCAaTAGGAa CAaCaCTTT	840

TACTTCAAAT TCTTCCATT TTTCGGGGTA ACCTTTCATT GTAAAGGGCA TTCCCTTAAC 960
 CTCCAATATG TTATAATTCA TGTTATATAC CACCATAATT ATAAAATGAA ACATATTAAA 1020
 5 CACAATTTTT TAGACTCCCG TCATAATAAC TTCAGACAAA CGTTAGTCTG ACCTGATAAA 1080
 TATTTAATTT TAAACGTTCT TGTCTCTCTC ACGAAAACCA TTGTGTTGAA TATTCATCAT 1140
 TGCTGATTGA ATATAATTAT ACTGTGGTAA ATCTGGTAAT ATCTTTATTT CTAATTCTGT 1200
 10 ATTTAATTCG AAATGCTTAG CGATGTTTTT AAATATTGCT AAATACTCGC CCATTAATTG 1260
 TTCATTTATT GTAAGTCTAT CTTCAATTAG CATGGCTCTA TTAAACATAA AGCTAATTTT 1320
 15 TTCTAATGCG AATAAGCTAG GATAATAATT TTGAATCAAT GTCTTATCAC TAAATAATTC 1380
 ACCATTAGCT GCATTATAAA CTTGCGTGCA TGTTATTTAA TTGC 1425

(2) INFORMATION FOR SEQ ID NO: 820:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1165 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 820:

nCGnCCTTAT ATATGTTTTT CATGTCCTAC AAAAAACGAA ATATTCCAAT TGCCTATATA 60
 30 CAGATATTCA TTAATGACAC ACTCAATAGC AACCATAACA ATATTATGTT ACCTATTTAA 120
 ATGAAATAGT TCTTTTAAAG AAATACATTT TTCACATATT AATCTATAAT CAAAATCAAC 180
 35 TGACCGATAT TCTATAATTT ATGATTAAAA TAAGTTATAA TATAATAGTA AAGATAAAGA 240
 TAGAGGTGGC TATAATGTGT GGACTTAGAA GTATAACATT AGGTACAACA AATATAGAAC 300
 AGACAaAAACa TTTCATGGTT GACATATTAG GATTAAATTA TGAAGAACTT CTTGAAACT 360
 40 CAATTCGTTT CGGCGATGCA GATATAAGCC CAGGAACAAG ACTTCAATTT ATACAAGTTC 420
 CAAGTGAGCA ATTAGAAGAA TCTCACTTTG TGGGTATTGG ATTACGTACA CCAACTGACT 480
 CAGGTTTAGA GGAGTATGCG GAAATATTAT CGAATAAGGA TATTCATTT ACAACAGTTA 540
 45 AAGAATTAAA TGGCAATAAA TATTTAGTC TCGAAGATAA CAATGGTCAT ATTTTCTCAA 600
 TATATTCAAA CGAGAATAAT TATGGCGTTG GTTAGGTAT GCCTTCTTyT GAGAGTGGG 660
 TCAATCCGTT ACATCAAGTG CAAGGTTTAG GACCAGTGAT TCTTAAAGTG AATCATGTAG 720
 50 ATATTACAGG TCAAATTTA ACAAATATAT TCGGACTTGA AGTATTGCA GAATACCAAC 780
 CCTTCGACAA TGCTGACTAT CATGTCCAAG TATTCAAAGT TGGAACGGGT GGTCTAGGTG 840

ATCAAGTTGA GTTTGAAACG AAAGATGCAG ATTTCTTTAA TCAAGCGAAA TCGCGCTTAG 960
 ATGAAGTGGA AATACCATAT CAAACGCTTG AGCAAGATGA TATTGAATCA ATTAGAaTTA 1020
 5 CTGAAAACAG TGGATTATCG TTTATATTCA CTTTACAAAA ATAATTTTTT TACGATAGCG 1080
 AGGACAAAAT TTATGTTACA TGAACTTGG AAAGAACGTA CACCAATCAA GAAAGTAGAA 1140
 GTCATTAATA CAGATGCAAA GAAAT 1165

(2) INFORMATION FOR SEQ ID NO: 821:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 821:

TCGCCCAATT ATTATGAAAT ATTCAATACA GTTTATTGAT CAAAAACAA AAATCCATTA 60
 TGAACCTTGT CATCACGAAT ATTAAC TGAC GTTAGATGGA CCTCTTTAAT GATAGAACAA 120
 25 TTAATAAATA ATGCACTTAA GTATGCGAGA GGTAAAGATA TATGGATTGA ATTTGATGAG 180
 CAATCCAATC AATTACACGT AAAAGATAAT GGTATCGGTA TTAGTGAAGG nACTTGCCTA 240
 AAATATTTGA TAAGGGCTAT TCAGGTTATA ATGGCCAGCG CCAAAGTAAC TCAAGTGGGA 300
 30 TTGGTTTATT TATCGTAAAA CCAATTTTCA ACACACACAA ACCATCCGTT TCCGTCGTAT 360
 CTAAACAAAT GAGGGTACAA CCnTTACGAn TnCCATTTC 400

(2) INFORMATION FOR SEQ ID NO: 822:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 760 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 822:

TGATATAATA CTTTGTGAAA GAAAAGCATG TGTGGGAGGT ATGACCTGTA TGTCGAACGA 60
 AATACTTATC GTAGATGATG AGGATAGAAT CAGAAGATTA CTAAATGT ATTTAGAAAG 120
 AGAATCTTTT GAAATCCATG AAGCAAGTAA TGGCCAAGAG GCTTATGAAC TTGCAATGGA 180
 50 GAATAATTAT GCTTGCATAC TACTAGATT T AATGTTGCCT GAAATCGATG GTATCCAGGT 240
 GGCAACTAAA TTGCGTGAAC ATAAACAAAC ACCGATTATT ATGTTGACTG CTAAAGGTGA 300

TTCACCAAGA GAAGTAGTCT TAAGAGTTAA AGCACTTCTA AGAAGAACGC AATCTACAAC 420
 TGTAGAACAA AGCGAACCTC ACGCACGTGA TGTGATTGAA TTTAAACATT TAGAAATAGA 480
 5 TAATGATGCA CATCGCGTAC TTGCTGATAA TCAAGAAGTT AATTTGACTC CTAAAGAGTA 540
 CGAATTATTA ATATATTTAG CTAAAACACC AAATAAGTA TTTGACCGTG AACAAATTATT 600
 AAAAGAAGTT TGGCATTATG AATTCTATGG TGATTTAAGA ACAGTTGATA CTCATGTTAA 660
 10 ACGcTTAGAG AAAAGTTAAA TCGTGTGTCT AGTGAAGCTG CGCATATGAT TCAAACAGTC 720
 TGGGGCGTTG GGTATAAATT TGAGGTTAAA TCTAATGATG 760

(2) INFORMATION FOR SEQ ID NO: 823:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 465 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 823:

25 CAAAGGAAAT TGCACAATTA GAAGACCGAT TACGTTACAG CTTTGAATGG GGGCTAATTG 60
 TTGATATTAC GCCACCAGAT TATGAAACTC GAATGGCAAT TTTGCAGAAG AAAATTGAAG 120
 AAGAAAAATT AGATATTCCA CCAGAAGCTT TAAATTATAT AGCAAATCAA ATTCAATCTA 180
 30 ATATTTCGTGA ATTAGAAGGT GCATTAACAC GTTTACTTGC ATATTCACAA TTATTAGGAA 240
 AACCAATTAC AACTGAATTA ACTGCTGAAG CTTTAAAAGA TATCATTCAA GCACCAAAAT 300
 CTAAAAAGAT TACCATCCAA GATATtCAA AAATTGTAGG CCAGTACTAT aATGTTAGAA 360
 35 TTGAAGaTTT CAGTGcAAAA mAACGTACAA AGTCAATTGC ATATCCGCGT CAAATAGCTA 420
 TGTcTTGTcy AGaGAGCTTA CAGATTtCTC ATTACCTAAA AATTG 465

(2) INFORMATION FOR SEQ ID NO: 824:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 355 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 824:

50 CACCGCGGTG GCGGACGCTC TAGAACTAGT GGATCCCCCG GGCTGCAGGA ATTCGGCACG 60
 AGGTAAGGAG GTCTCTGTAC CATGGCTCGT ACAAAGCAGA CTGCCCGCAA ATCGACCGGT 120

GGAGGGGTGA AGAAACCTCA TCGTTACAGG CCTGGTACTG TGGCGCTCCG TGAAATTAGA 240
 CGTTATCAGA AGTCCACTGA ACTTCTGATT CGCAAACCTC CCTTCCArCG TCTnGTGCGA 300
 5 GAAATTGCTC AgGACTTTaa AACAGATCTG CGCTTCCAnA GCGCACTATC GGTGG 355

(2) INFORMATION FOR SEQ ID NO: 825:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1099 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 825:

TTCACCTGGC TTGTTGactG ACTTGTAatAT GATGATGTGC TTTGTGAATC GGATTcGCTC 60
 20 GTGCTTGTAC TTGTTGAGTT TGAGGCACTT TGGCTTGCTG AGTTTGAGTC TACTCCGCTT 120
 TGATTCATTG AGGCACTTAG TGACAATGAT GTACTCGTTG AGTCAGACAA ACTTGTACTC 180
 GTTGACGTAC TTGTACTTCC TGATGTTGAT TGAGACATAC TTATGCTCAT TGATGTTGAA 240
 25 TCGGATTTAC TTTCACTTGA TGATGTTGAG TCGGATTCAC TTTCACTTGT AGAACCACTT 300
 AATGATGTGG ATGTACTAAT GGAATCAGAT TTACTTGTAC TGATTGAATC ACTTGTCGAC 360
 ATTGATGTAC TTAATGAATC AGACTTACTA TCACTTGTGG AATCACTTAA TGATGTTGAC 420
 30 AAACCTTGTAG AGTCAGACAA ACTTGTACTC GTTGACATAC TCAGTGATGT TGAAACACTC 480
 TCGCTCTTAA ACGTTGACGT TGATTCACTG ATACTTGTCTG ATGTTGAAAT GGACGTACTA 540
 CCACTTGTG AATTACTTAA TGATGTTGAT GTGCTACCAG ATTCTGATGT ACTGTCTGAT 600
 35 AATGACGTAC TCTCACTTGT CGAACTACTC ACTGACTCTG ATGTTGATTC AGACGTACTT 660
 TCACTTAATG ATTCACTTAA AAAGGCAGAT GCACTTTGTG ATTCTGAATC GCTAGTACTA 720
 40 TTTGATTCAC TTAATGATAT AAACGTGCTC TCTGAAGCAG ATATTGCTTC ACTTATAGAG 780
 TCGCTCGTTG ACGTTGATTC ACTTATTGAA TCAGACTCTG ATGTACTTAA GCTTGTGGAA 840
 TCACTCaTAG ATGTTGaTGT ACGTTCTGAA TTACTTGTAC TTAACGATGT CGAAGTACTT 900
 45 ACCGAACCAG ATGTGCTCGT AGAAGCACTT TgTGATATTG ATTCACTTGA TGCAGTTGAT 960
 GCTGATTTGC TATCACTCGT TGAATCACTA AACGACGTTG ATATGCTCaT TGAATCGGAT 1020
 TGACTTGcAC TCantGAACC AGACGTACTT TGTGATTCCG AAGTACGTAC TGAAGCACTT 1080
 50 GTCGACGTTG ATGTACTTG 1099

(2) INFORMATION FOR SEQ ID NO: 826:

(A) LENGTH: 338 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 826:

10 TATGCGTATC CTGATAGTCA CTTTGATTTT GATATGGAAT TAGCGAAAGA GCAATCTCAA 60
 GACAATCCAG TTTACTATGC TCAATATGCA CATGCGCGTA TTTGTTCAAT TTTAAAACAA 120
 GCGAAAGAGC AAGGTATTGA AGTGACTGCT GCGAATGATT TTACAACGAT TACTAATGAA 180
 15 AAAGCGATTG AATTGTTGAA AAAAGTAGCT GATTCCGAnC CTACAATTGA AAGTGCTGCT 240
 GAGCATAGAT CGGCACATAG AATTACTAAT TATATCCAAG ATTTAGCCTT CTCATTCCAT 300
 AAATTCnATA ATGCTGAAAA GTGTACCAGT TGGTATTG 338

(2) INFORMATION FOR SEQ ID NO: 827:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 838 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 827:

30 GTATTTTCTT TCGCGAATGA TTTTATTACT TGAATACCAC GAATAACCTC CAATACCTTT 60
 TCCACTAATT GGTTTTGTAC ATTATGATAC GcTGGCGCAT TTTGTGACT CTTTCTTTCT 120
 35 AATAATTGAA TCGCAAAAAA TGATAGTAAT ACGCCAATGC ATGCTAATAA TGATACTTGC 180
 CACGAACTA CAAGTAGAGA CAATATGAGT ACTGTAATTA ATATGTATCC ATTAACAACA 240
 ACGTCCACCA TTTTCATAGC AAAGTTTTCT AAAAAGGTTA AATCTGTTGT TACTATTGTT 300
 40 GTTAACTCAT TTGAATGATG CGAATTAAAA TAACCTAACC TTACATTTTT CAATTTATCC 360
 CCTATATCTA AACGTTCTTT CGCACTCATT TCATAAGCGA TGCTCTCATG GCTTTTGCTT 420
 TTGAAATATG CTGTAATAAA TCGTCCAATC ACTAATAAAA CCATGATAAT TACAACATTC 480
 45 AATATATCTT TCATATAAAT AGGTTTATGA GATAGCACAT TATTAAATAT TTTTGCAGCT 540
 AAAAAGATAG GTAACGCAAT AAAAATAGCA TTTAAAAATG ACATGCTAAA TCCTAAAATC 600
 50 ATTCTTGCTT TATATGGTCT TATCCAGTTT AAAATTTTAA ATGTAATTTG AAACATATTT 660
 GACCTCCTTT TCTCATTAGT TTAATTATGT CCAGTATTGA TTCCCAATC TTTTGTATGC 720
 ATGTGCGTAT CCCACATTTT CTTATAATTA CCGTTTAATT TTAGCAATAA GTGATGTGAC 780

(2) INFORMATION FOR SEQ ID NO: 828:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 898 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 828:

```

TCCnAAAGAA GAAATAaCAT TATCATaAAA TCCATTGAAT ATAAATTCAG TCATCCCCTC      60
TGAACtCTC CATAAATATA ATGGTGAATA AGTATTTGTA ATGCAATTAG TAGTTGTTTG      120
ACTTATTAAA TAAGCTTTTA TAATTAAATT TTTAAATCCA TCAGTCTTAT AACCATTTTAA      180
TCGAACTCTA TCTCTAATTA TTTCCATATT GTAATCACTA GGCAACTTAA CATGATATTG      240
CATTGCATGC ATTTAGCATA CCCCCTTTTA TAAAAAGGAT AGCAATAATA AGTAAATCT      300
CATATTATCC AATTGTGATA TAGTTATCAT AAAAAGTGAT AGGTGATTAA ATTGAACTTT      360
AATGATTTGG AAATTTTAT AACTGTATGT GAAGAAGCAT CTATCAATAA AGCTGCAATT      420
AAACTTAGAT ATGCACAATC TAATATATCT CAAAGAATTA GCAAGCTTGA AAATGAATTA      480
GGTGTAGTTT TGCTTTTtag AAATCAAAAA GGTGCTAAGG CAACTAAAGC AGGCGAAGAA      540
TTCTTAGCGT ATAGCAAAAA AGTATTAAGA GATACAGAGA CTATAAAAAA TAAATGAAA      600
AATAATACTA TGTCTATTTT ATGCTCAGAA CTGTTATTTA ATTATTTATC TGAGAGCGAA      660
GAAATTATGA TGTCGAATAA CTCAATTAAT TTTATTTCTA GTGGAAATAT TAGAAAAGCT      720
ATAGAAAAAA ATAATTATGA TAAGGTTATT TCATTCATAA AAaTTAACGA CTCAAATTAT      780
AGACTTAGTA ATGTTGATAC TATGaaAGTA ACGCTTTACA GTAATGGAAG TAATTATGAT      840
AAAGAGGCTT TACTAATAAA TAAAGATGAG TTTGGTCCTT TAAGGnAAAT AACTTTAG      898

```

(2) INFORMATION FOR SEQ ID NO: 829:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 798 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 829:

```

AGTAGGAGTC ATAAATCGn ATTTCAAAG CAATTAATGC AAAAATACTGA GTCTACAGTG      60
CTATTTGCGA AAGCGTCcAT ACGAAgTTGA GcAATGCTAA TAATAATGGT CTATCAAAAA      120

```

	AATATGTTGA TAGTTACACT GATTCTCTTA CTGGAGTAAC AACTTCTGCT TTTTAAATA	240
	AAGATACAGG CAAAGTAACT CTCGGGATGA CTGGGACTAA TTTACAAGAC GAAGCCTTTA	300
5	AAAAGTTAAA AGAAGGTGAA TTTTCAAGAC AAAATGTTAC CAATGCTTTG GAAACAGTTA	360
	AAGATGGATA TGCAGATCTT AAAATATTAT ATTCTCCTGC ATCTGATCAA AACTATAGAT	420
	ATGCGAATAC ACAAGAATTT ATAAATAAAA TAAAAAGTAA GTATGACATT GATTTTATTA	480
10	CTGGACATTC ACTAGGTGGA AGAGATGCGG TAGTTCTAGG AATGAGTAAT GGTATTCCGA	540
	ACATTGTGGT TTATAATCCA GCTCCTATTT CTATAACTAG TTTGAATCCT AATTCCCCAG	600
15	ATGGAAAACG TTTATTAGAA TTATATAAAA ATTATAAAGG TAATATTACT AGGTTTGTTG	660
	CAGAAAATGA TGCATTGACA GAAAATCTGA AGAAATATAA GCATTATGTT TTTTTCGGTA	720
	ATGATAAAGT CTTTAAAAAT GGTAAAGGTC ATGAAATGKa AGGCTTTCTG ACCGAAGAAG	780
20	AACAAAAAGC tATAAAAn	798

(2) INFORMATION FOR SEQ ID NO: 830:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 830:

	AATATCAATC TCTTCATAAG CTGAATTATT TTCATGCACT TCTTGATGTG ATGATTGTGTC	60
35	ACGAACnGCT ACAACTAACA TTTTATCGTC TAAAATAAGT TGTTTATATT TTTCTAATTC	120
	ATCAGGCGCT AAGTTGTAGC GTGATAAAAC TGCATGTTCA CCATCTTCTC CTGTAAACAG	180
	TTTAGTCATT CTATCACTAA ATGTTCCACT TGTTGAGATA AGGGGAGATT TCAGAGTCGT	240
40	GTAAGTCATT AGGTGTAATT TACTTTTACT AATAATTGTT AGCCTGATCT AAATAACTTC	300
	AGATTCTTTG ATTGATAnGT GnATAATCGC AGTGCATTAC ACAGAATACT GCCAAGTGCG	360
45	CCCTTAAAAT TGTTATTAnC TTACCTCTAT ATAAGAACCC	400

(2) INFORMATION FOR SEQ ID NO: 831:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

EP 0 786 519 A2

	AAGTCTGCAT GACTTTTATT TGCAAGTTCTG ACTGCTTGAT CAAAAGCGCG ATGATCTTCA	60
	GGATTAGCAC TTTGAACTGA GCTGAAATTC GGATCAGGTT TACATTGTGC TTCTACAAGA	120
5	TTAAATTGAT TGAAATTCAA AGATTGTAAT AACTCAGGTA CAATCGGAAC ACTTGTACCA	180
	TGCAAACTAG TGAACACAAC TTGTAAATCA GATTTAGGAA TATAGCCAAT CATATTTTGA	240
	ATGTGTTTCA TATAGTCATC AGTTACAGAT TTCGAAAAG GCTTGaTATA AGATGTATTT	300
10	TGTTTAGAAA LAGGTATATC AATCTGTAAT GGATCGCCAA CTTCTTCGAT ATAACGACTT	360
	GCAAGCTCAG ATGCATCAGT CGATAATTGC GCACCATCAG AACCATATAC TTTGATGCCG	420
15	TTATAGTCTT TCGGATTATG ACTTGCTGTA ATCATAATGC CAGCAGTAGT ATTAA	475

(2) INFORMATION FOR SEQ ID NO: 832:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 724 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 832:

	CTTGAATTGA AGGATACGCA AATGATGCAT AATCAGCTTC TGTATAAAGC TGTAATGTAA	60
	TGTCATCAAG GTCACCTTTT CTAACAAGCA CCTTATTAAT AGAAGTATGA TTCGCTTGCC	120
30	AAGTACCTTG ATTATTTTGT TCTAAATGAA TGA CTTCGCC TAACGATTTC AACGTAATAT	180
	CTGCACGCTC GTCCTCGCTA ATAGTATATG TCTTACCATC TCGCAAATTG AGCATCTTCA	240
35	ATTGTTTGTT ATATTTTATA ATCAATTTAT GCATTGTCTT TGCCTCAGTC CTATACTATT	300
	TTTTCTTTC AGCTTCTTGG CGTTTTTCTT TATCTTTTTG TGCTTGTTCT TTTTGTCTT	360
	TTTCGTTCTC TTCTTGTTGC TTTAATTTCT CATCTTTCGC TTTTGCTTTC TCTTCTTCAG	420
40	ATTCGCTTT TTCATCTTTA ACTTGTTTTT CTTTGTCTAA AATATCTTGC AATTTATCGT	480
	TATACTTTTT CGTTTCTTCA GAACGTTTAT CATTCGATAA ATCTCCGTTA TTTTAAATCT	540
	CATTTAATTT ATTAATCAAC GCTAACTTTG TAATATCGTT ATCATCTAAA TAAGTGGCAA	600
45	TATTAATCGC TTCATCAAGA TGTCTTGTC CTAATTCCAT CCAATATAAT AAGTAGTCTT	660
	TGTTTGAATT TGGTGTCACA TTATTAAGTA AATTTTCTTT CGTATCTGTh TCTAAACChT	720
50	GTTn	724

(2) INFORMATION FOR SEQ ID NO: 833:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 994 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 833:

	AGCAGTTTGG CTCGTAGAAA TCTCCCGTCT CTATTCTATG TATTAACTTT TATTATATTT	60
10	GTTATGATAC TATCGATATG AAAGCGTTGT CAATGGTTTT TGTA AAAATT TTGTCAAATT	120
	TAATTTTTCA AGTCTTTATA AAAGTAGTTT AATTTGAAAA CTAGAAATAC CAATCCTAAC	180
	TAATTTATTT ATGACGCTCT TTTGTTTAAT TGACATTCTT CAGCCATATT TTTTATGACT	240
15	AGTTGCATTT TTTACTAATA AACACCTCTA AAAC TTAAAT GATTTTAATC GTTTTAGAGG	300
	TGCTAATTAT TTTATTTGAT TATTTTTTGT TTGATACCTA CTGCATATCC CATATGAAAA	360
	CGGCTTTTTT ATTATGTTAT ATGACTAAAT CTCGTGAAAA ATGAAATTTT TGCAGACTTA	420
20	TGATTTAGCA AAGTTTATCA TAACTAGTAG TTACATATTT CGCTCCATTT TTAACAGCTT	480
	CATTGACTTC ATCTATTGTA TTAATTAGGC CACCTGCAAT GACTTGTGTG TTTGTTTCTT	540
25	TCTGAATATG ATGAATCGCT TTA CTGCAA CACCTGGAAG TACTTCAACA AAATCAGGTT	600
	CAACTTTTTT TATCAAATCT ATACTGCGTT TCAATGCTTG ACTATCAATA ATAAATACTC	660
	TAAAAATCGT TAAAGTATTT AATGATTTAG CTTTTTTTAT TACTTTAGAT TTAGTCGATA	720
30	CGATACCTTT TGGCTTGAT TGCTGAATAA TAAATTCAT TGCAAATTCA TCGTGGCTTA	780
	AACCTTTTTAT CAAATCTATA TGAATAAAAC ACTCTATATG ATTTTGCTTC AGCAATTCCA	840
	TAATACTTTT TATATGTCCT ATATGCATAT CTAGAAGCAC ACACATTTTA TAGTCTGTnT	900
35	TAATCCAGTT TCTCTAAATC nTTAATGTTT CCTATAAGCA GGCAATATGT TGTTAATTCA	960
	CTnGATCCAT CCTCTCTACA TCACACGCTT AAAT	994

40

(2) INFORMATION FOR SEQ ID NO: 834:

45

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 783 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 834:

50	TCnACAAAGT CGGTATTAGG CTATGGGCCA TTTnACTATT ATA ACTAATC GGAAATATAC	60
	CACATAACAT CATTATTGAG TTGATTCTAT CATTGGCTT ATTAGGGTTT TTTATCATAA	120
55	TGATTTGCAT TTTGCTACTA GTTTATAAAA TGATTAGGAA CTATGATCCA AACACTATAG	180

ATTTAGTTGT AAGTGAATTT TGGTTTGTGT TGTTCATTTT TATTACAAA GGACGGCGTC 300
 ATCATGGCTA AGAAAGTTTT TATTATGGAT AGCGTAAAGA CAATAATTGG TACGTTGCTT 360
 5 ATAGCTTTAG GATTACAATT TTTAGCTTAT CCAATTATTA ATCAACGAGT AGGTAATGAA 420
 GCGTTCGGTT CTATTTTAAC GATTTATACA ATAATAACAA TCACGAGTGT TGTATTAGGC 480
 AATACGCTTA ACAATATACG mTTGATTAAT ATGAATCTAT ACAAATCCAA TCATTACTAC 540
 10 TGGAAATTTG CATCGATACT TTTAATCTCA ATTCTGATTG AGAGTATAGC TTTAATTATT 600
 GTATTTCTTT ACTTTTTTAA TTTGAACATC ATCGATATTA TCTTTTTTAA TCTACTTAAT 660
 15 ATTTTAATGT GTTTAAGGAT TTATCTGAAT GTATTTTTTA GGATGACTTT AAAATATAAT 720
 CAGATTTTGT ATATTGCTCT TATTCAATTT TTAGGTTTGC TGATAGGACT ATTTCTATAT 780
 nAT 783

(2) INFORMATION FOR SEQ ID NO: 835:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 794 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 25 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 835:

30 TTACCTAATT TTTCAATCaT AAGATTCCCC CTATTGTTTA AACaTAAAAA TATTATaCGA 60
 TTAAGCACGA GmCACTTCAA TATATTTTTTC AGAATATTCT TATAAATATT AATATGATCA 120
 35 TTTCACTATT TAAACACGTT TAATATTAAA ATAAGTTATT CATATAAACT GGTGCTGTTT 180
 GATCCAATTG CAGACTTACG AGTCATTGAA AAGTCTCACA AACTATTGmA AGTAAAtATC 240
 TTAAATAGA AAGTGAATGG TTAATTTAAG TATATTTmAA AAATATTAAC CTTTTTAAGC 300
 40 ACTGCTATTT AGGATATACT AAATAATAAC TAAGTTTAGA AAAATAGGAG GAACATCGTT 360
 TATGTTAAAC AAGGTTTGGT TCCGAAGTGG CATCGCTCTG ATTATGCTGT TCATTCTCAT 420
 CAACTATTT ATGGAAGTGC ACGAAGTATT TACTCCAATA GCTACAATCA TCGGTTCTGT 480
 45 ATTTCTTCCA TTTTAAATTA GTGGTTTTTT ATTTTATATC TGTCTACCTT TTCAAACTT 540
 ACTTGAAAAA GTCGGTTTTTC CAAGATGGGC TAGTATAACA ACAATCATGT TAGCTTTGTT 600
 50 TGCTATTATC GGCTTAATTG TTGCGTTTGT TGCACCAATC ATCATTTCAA ATATCAACAA 660
 TTTAATTAGT CAGACACCTG gCCCTACAAA AAGGAAGCAG AGCAAATTAT TAAATTCGCA 720
 CTGGCTCAAA TGGnTAAATT ACCTGGAGGA TGTAACCAng TGGATTACCA ATATGGTAAA 780

(2) INFORMATION FOR SEQ ID NO: 836:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 836:

TGTTTATACT GTGCCTGAAT TAGAAGAGGT TTTAACACCT ATGAGACAAG ATGGAACTCG	60
TGATATTTAT GTTAATTTAG AAAATGTGAG TtATATGGAT TCGACAGGTT TAGGTTTATT	120
CGTAGGTACA TTAAAAGCAT TAAACCAAAA TGATAAAGAA CTATACATTT TAGGTGTGTC	180
AGATCGTATC GGTAGACTAT TTGAAATTAC TGGTCCTAAG GATTTAATGC ATGTTAATGA	240
AGGAACGGAG GTCGAATAAC ATGCAATCTA AAGAAGATTT TATCGAAATG CGCGTGCCaG	300
CATCGGCAGA GTATGTAAGT TtAATTCsTT TAACACITTC tGGCGTTTTT TCGAGACTGG	360
TGCCACATAT GATGATATTG AAGATGCCAA GATTGCAGnT	400

(2) INFORMATION FOR SEQ ID NO: 837:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 837:

ATTGATCCAT TTTGCGGTTT GGGTACAATA GCTATAGAAG CTTGTTTAAT TGCTCAAAAT	60
ATCGCACCTG GTTTTAATCG CGAGTTTCGTA TCAGAGCAAT GGAACATCAT GCCAGCAAAT	120
ATTTATGATG ATTACCGTGA TGAAGCGGAT AAGATGGCTG ATTATGATAA AGAAATCGAA	180
GTATATGCTT CTGATATCGA TCCAGAAATG GTAGAGATTG CTAAGCGTAA CGCTGAAGAA	240
GTTGGGTTGT CTGATATTAT TAAATTTAGT GTAAAAGATG TCAATACATT AACAATTGAT	300
ACAGAAGAAC CGGTGGCGTT AATTGGAAAT CCTCCATATG GTGAACGTAT TGGTGaTCGT	360
GAAGAAgTtG AAGAAaTGTA CCGTTATATT GGTAAACTAA TGAAACAACA TCCATTTTTTA	420
TCTACATACA TTT	433

(2) INFORMATION FOR SEQ ID NO: 838:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 926 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 838:

5	ATTGGGCCAA CTAATCCTGT ATATCCAAAT CCAGCAGACA ATGGTGTTC TTTAACCTGA	60
10	AGAACGTAAG CAATGATTCC AGTAATTATT CCATTTATAG TCAATGGTAT CGAAATAATT	120
	AAATTTTTCAGTAAGTGG GATCATCATT TTTGCAGCTC CTATGAGTAA AACTGCATTT	180
	ACACCAATAG AATTGACACG CAATGAGCCA AATAAGAAAG TAACACAGGC AGCCACTATA	240
15	CCTAGGTTTG CTGCTCCACT TCCTAGTCCG TTTAACTAA TCGCAGTTGC AATCGCTACT	300
	AACGATATTG GTGTTACCAT TAATAATGAA AATGCCACAC TAATAAGTAT AGACATTAAC	360
	AACGGATTTA AGTCTGTAAA AGAATGAATT ACATTTCCAA TTGCTTGAGT AATTTTTCGA	420
20	ATGTAAGGTA ATGTGATTAG ACCGATACCC CCACTAACGA TAGGTACTAA AACTGGTAAT	480
	ATAATTAATT CAAAAGATCC AAGTTTGTTT TGTAATACCA TATATATAAG ACATGCAATA	540
25	ATAACAACCA AACTCGTATT TATAATGtCa CCTATACCTT TTAACATAAA ACTATTATTG	600
	CTATATACAA CAGCACCTGA ACCAATCATA GCTGATGTAC CTACTATAGC AGCACCTGCA	660
	CCATTAAATT TAAATTGATG AGCAGCTAAA ACCCCAATAA TAAATGCCAT AAATGATTGA	720
30	ATTAGTATCA CTAAGTATA CGTTAATTCT AAAATTTTCAT TACCACTTTT AAATATTTTt	780
	AATACTTCAC CTAATAAAGC ATTCGGAACA AGTGCAATAA CAACACCAGC ACCAATAGAA	840
	TTTAAAATCT TACTGAAAAA CTGTTTATTA TCAGCATTAT TTGCGTTACT CATAAACGAC	900
35	CTCCAATTTG AACATTAnAC TCATCA	926

(2) INFORMATION FOR SEQ ID NO: 839:

(i) SEQUENCE CHARACTERISTICS:

40	(A) LENGTH: 400 base pairs
	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: double
	(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 839:

45	CTTCGAAACG TACTTGGTCA TTCCCTTTAC CAGTACAACC ATGTGCAATA CCTACTGAAT	60
50	TTGTTTTCTC AGCAATCTCT ACTAATTTTT TAGCGATTAA TGGTCTTGAT AAAGCTGAAA	120
	CTAATGGATA TGCATTTTCA TACATTAAAT TTCCTTTGAT TGCATAACTT ACATACTCAT	180
55	CACTAAATTC TTTTGTGCA TCAATAATAT GACATTCAAC TGCTCCCAT TCTAAAGCTT	240

CGTATCctTT GTCGATAAGC CATTGAACGG CCACACTTGT aTCTAGtCct CckGAATATG 360

CTAAAACAAT TTTCTCTTTC ATAAAATTCA CCTCATTGTA 400

(2) INFORMATION FOR SEQ ID NO: 840:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1043 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 840:

GGATCGCGGT GTTGTGCTTG ATATACTTTG TAGCGATAAC GTTTACCTAC ACAATCATAA 60

CGACAATGAA AATCGTCATC GACTGTAACT ACATTGTTGA CATAAATATC ATCAGGTAAC 120

GTTCGGTTCA TTGCATATTG CCATTGTGAC ATAGGTATAT TCAGCTCTGT GTCGAAATGA 180

AAGTATTGCT GTATCGCATG TACACCTCTA TCAGTCCTAC TTGAAGGATG GATTCTCACA 240

TGTCCTTTTAT GCATGCGTTG TAATAGCTTT TCAAATTGTT GCTGTACCGT TCGACCATTT 300

TGTTGAATTT GAAAACCTAG AAAATTATTT CCTTGATACG CAATTTCTAC TAATATACGC 360

ATGAATTTAC ACTCCTGAAT ATTTAATAC GAATAAAATA ATTGCAATTG GGATAATCAT 420

GGTTAAAGAT ATCGTATCTC TCAATGCCA TTTAAGCTGT CTGTAGCTCG TTCTCTTAAC 480

ATTGGCATCA TAACCCCTAA CTTCCATTGC GACCGCTAAT TCTTCGGCGC GTTGAAAGC 540

TGAGATGAAT AGTGGCACTA GTAATGGAAT AAATGATTTA ATACGTGTTG CAATGTTCCC 600

TGAACCTTATT TCAGAACCAC GCGACTTTTG CGCCAAAATG ATTTTATCTA ACTCATCCAT 660

TAACGTCGGG ATGAATCGTA ACGCAATGGA CATTATCATA CTTAATTGAT GAACTGGTAA 720

TTTAAACATC tTTAGTGGTG CAAGTAATCT TTCAAACGCA TCTGTAAAT CAATTGGACT 780

TGTAGATaGT GTCaTAATTG TTGCAATCAT TAcAATCCCA ATTAAACGCA GTGrTATATA 840

TAGCCCTTCT AAAATACCAT TAGTTTCAAT CGTGATGCCA TGCCATTCAA CTAATACATA 900

TCCACCTTTA GTTAAAAATA TATGCATCAT TAATGTGAAG ATTAAAAAGA AAAATATTGG 960

TGTTAAACCT TTGATTAGGA ACCATAATTG AATTTTTGCT AATCTCATAA TGAAnAnGAT 1020

AAGTGCAAAC ACCCAAAGAT ATG 1043

(2) INFORMATION FOR SEQ ID NO: 841:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 841:

5 TCGAAATCAA ATTATAATAG ACAATTTTAG GAGGTGGACT TTCGATGACC AAAGGAATCT 60
 TAGGAAGAAA AATTGGGATG ACACAAGTAT TCGGAGAAAA CGGTGAATTA ATCCCTGTAA 120
 CAGTAGTAGA AGCTAAAGAA AATGTTGTAT TACAAAGAA AACTGTAGAA GTTGATGGAT 180
 10 ACAACGCAAT CCAAGTTGGA TTTGAAGACA AAAAAGCATA CAAAAAGAT GCAAAATCTA 240
 ATAAATATGC TAATAACCA GCTGAAGGTC ACGCTAAAAA AGCTGACGCh GCACTGAGAG 300
 nTCCCCTCAT AATTTCCCCA AnCGTAACCA TGTGTGAATA AAT 343
 15

(2) INFORMATION FOR SEQ ID NO: 842:

(i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 430 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 842:

25 ATGAGTATTT TAATGATGCG CTACGAGCGT ATGGTCTTAC TGTGAnAACA GGTGAATTTG 60
 GAACACACAT GAATGTTAGC ATAAATAATG wtGGwCagTC TCTGGTAGTT TAGAATTAGA 120
 30 AGAATTAAAG CAATTTAGAC AATGGGGTTC TAAACACCA GGTCATCCTG AATACAGACA 180
 TACAGATGGT GTAGAAGTTA CTACCGGACC ACTTGACAA GGTTTTGCTA TGTCmGTAGG 240
 ATTMGCTTTA GCAGrAGATC ACCTAGCAGG GAAATTTAAT AAAGAAGGAT ATAATGTTGT 300
 35 AGATCATTAC ACATATGTAT TAGCTTCTGA CGTGATTTA ATGGAAGGTA TATCGCATGA 360
 AGCAGCTTCA TTTGCTGGAC ATAATAAATT AAGTAAATTA GTTGTTTTAT ACGATTCAAA 420
 40 TGGATATTTT 430

(2) INFORMATION FOR SEQ ID NO: 843:

(i) SEQUENCE CHARACTERISTICS:

45 (A) LENGTH: 329 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 843:

50 GGACTGCCCCG ATGATTTGAC AAATGAATTG CTGATTTGAT TTATATATTA TCTGnAATTA 60
 55

TCATCTATCC AACAAATATGT CTTATCAATG GTATAGTCTT TGCACACCAA TGGAGGnAAA 180
TAAATCTCAA CCTTACTATA TTAATATATA ATCAAATCTT AGATTAATA GTGTAATGAT 240
5 ACAGATGGAT AATTGAGTAC AAATTTAAAA CCTGAGATT TTCGCTTTAA TTTGAAAACC 300
TCAGGGnTTA TTTGATTTTT ATATAATGA 329

(2) INFORMATION FOR SEQ ID NO: 844:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 844:

20 AGATGAAGAA AGTGTTCAT CGATTATCTT AACAGTTGTT GCTTTATATA CTACAnTTCT 60
TCCTAGATCT TGTACCGTTG AAAAGAGACC TGGTTGTAAA ATCTTAATTG ACATTTTCAA 120
TCACCACCCA GTCATCAACA TTAAAGTTGC CATCTGATAT ATCTCTTCG ATTTGTATAA 180
25 ATTTCTGTTC ATCTATTGCA TAAAAATTGTA TCCATTCTCC TGCTTCGTAC ATTGACATTG 240
GTTACGCTC GCTGCTAAAT ACTTTTAACG GTGTGCGTCC AATAAATTGC CATCCGCCAG 300
GGAAATCTGA TGGGATATAG TCCTGTTTGA TTATTCGCAA TACCTACAGA ACCTGGCATG 360
30 AATTTTTTAA CCTTGGGChG ATTACGTCTA nGGnGTATGT 400

(2) INFORMATION FOR SEQ ID NO: 845:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 535 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
35 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 845:

CATAAGTCCA GTAACCTTCA ACTGTGTCCT CATCTTTAGT TCCAAATATA TCAACGTATT 60
45 TATTTCTTAA CTGATTAATG TTTCCCCAAC TCTCGGATCC AAACACTGA ATATGACTAT 120
ACCAAACCCA CGTTTGCAAT GTTGCATGAA TGCTACCATT GGGCTTTTGC CATAACCATT 180
TTCCAGATAA TGAAAAATGC GGCTGAGTGT AATATTTGAT TAGTTCATTG ATATTAGTCT 240
50 CGTTTTCCT GATATTATAG GCTTTTGCTT CAGATGAAAA ACTGATTGGT GTTTTAGGAA 300
GTTGTGTGA TGTAGTTTCT AAAAGTAACA ATGCTGTTGA TAAAACTAAT TTATTCATGA 360

ACCGATTCGG AATTAAATAA AAGCTAAAAC TATGTTAAAT AAACCTAAAC AGTTAGTAGT 480
 GTTATTTAAG CAAAACCTTAT CATTTTTTAAG TTGGACAGAA CAGATCAATA AGAGC 535

(2) INFORMATION FOR SEQ ID NO: 846:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 509 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 846:

TCAATCGATC AAATGGTGAT TGACCTTTTA AATTTGTATG ATCAAAATAA TGATTGTTGG 60
 CCATATCTTT ACTATGCTTA CGTGCAGTTT CAGAATTCTG TTTAGAATAC TTCAATGTAG 120
 ATAATTGATG TTGTTTTCTT TCAGCATTAA CTAAATCAAA ATTTTGTAGT TCAAAACTAT 180
 CTGCAAGCGA TTTCGATGGT GCTCCATATT GTTCTTTTAA TCTATTTTCC ATAGCATCAC 240
 TTAATTGTAA AACAGCTGTT ACATTATTAC GTCGATGCTT ATCATAAAAT ACCGTCGTAT 300
 AAATGTGATT TTTATGGAAA ACATCATATT CTTTATTATT TTGTTTCGTAA CGCACTCTAC 360
 CTTTAACAAT CTCTGTTTCT GGTTCGCCTA ATCTTTGCCT TACAACCGAT TTAGGTGTAT 420
 TGTATTTAAT TTTTGATTTT GAAGTGATTA TATTTTGATT TGTATATAAC GCATTAACCTT 480
 TATCTTTCAT GTAACCTATC ATTATAAAA 509

(2) INFORMATION FOR SEQ ID NO: 847:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 847:

CGTATTGATC TATAAATAGT GTTTAGATGC TATAGTCGGA TGCTTAAGTA ATTTAAAGAA 60
 AGTATCTTTA ACATCGATGT GTGTATAATC ATTTTTAGAA GTATTATAAT CTTTTTCTTC 120
 TCCCTTCTAA AATATATACA GGTGCTTCAT CAGCTAGTGG TTCAACTGGA ATGTCAGCAT 180
 AAACCTCGCA TCAATATGTT AACAAAAACG ATTGTATCTG TACTTCACCT ATAACAGCAC 240
 TATCCAATTC GTGCTTATCA AATAAACTAA GATTTTTGTC AGTACCTTTT CACAACCTAGT 300
 ACATACGTCT TGAGTTCTGA AGCATCATTT CATAAGGAGA ATACTGGCCA CGTGTGGACT 360

(2) INFORMATION FOR SEQ ID NO: 848:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 848:

TACCACTTGA ATACATTGCA TATAAAATAC GACGTTGTAC TGGTTTTTAAA CCATCACGAA 60
 CATCTGGCAA TGCACGCTCT TGAATAATAT ATTTACTATA TCTTCCAAAG CGATCACCTA 120
 AAACATCTTC AAGTGATAAA TCTTGAATTA TTTCACTCAC TAGATTTTCCT CCTCATCAAA 180
 TTGATCATTT TCAAGCACTT GTACTTCAGA ATTATCTAAA ATACTTTGGT CCTCTTGCAT 240
 ACCAAACTCA ACATGCTTTT CAATCCATTC ACGTCTAGGT TGTACTTTGT GCACCCATTG 300
 AATGTTGTGA CACGTTTGA TGAACGCAC TTGCATCTTG CAACTTGTTGA CACGnATTGA 360
 AAGTTnCGTG TTTGCGGGGG TThCAGCGTC GTTTGCCCAT 400

(2) INFORMATION FOR SEQ ID NO: 849:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 849:

TTTATATGAT TTATTTGAGG AGTTAAGAGA TTTATTTTAAA GAAGAAGATT TAGAACCATG 60
 GACATCATGC GAATTTGATT TTACAAGAGA AGGTGAATTA AAAGTTTCAT TTGATTATAT 120
 TGATTGGATA AATTCAGAAT TTGGTCAAAT AGGTCGACAA AATTACTATA AGTATAGAAA 180
 ATTTGGAATT TTACCAGAAA CGGAATATGA AATTAATAAA GTTAAAGAAA TCGAGCAATA 240
 TATTAAAGAG CTAGAAGAAT AAACATCTCT AATGTAAGAC TAAACAATAA AGCTTTGTTT 300
 AGTCTTTTTA GCGTTTAACT AAAAAGCaAT AGATACCGTA AAGTTGATGC TCATCAAATA 360
 ATAATATAaA GATAATTTTA GGTTTTTTAAA CTTTAAATCG 400

(2) INFORMATION FOR SEQ ID NO: 850:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 923 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 850:

5 CAGGCCATAC TTACAATTTT GGCCATCGTC CGGATGTATT nGGAATCGTT GGATAATAAG 60
 CATCAAGGTC GTGACTATTT CGTAAAATTC CAACTGTCCC AGAATTTACA TCATTATGTC 120
 CAATTACTGG GCAACCaGAT TTTGCCAACT ATCTATATtT CaTATATTCC aAATGTTAAA 180
 10 ATGGTTGAAT CAAAATCTTT GAAATTATAC TTATTTAGTT TCAGAAATCa CGGTGATTTT 240
 CACGAAGATT GTATGAATAT TATTATGAAT GATTTGATAG AGCTTATGGA CCCACATTAT 300
 ATTGAAGTCT GGGGCAAGTT CACACACGTG GTGGAATTTT TATTGATCCT TATACAAACT 360
 15 ATGGACGTCC AAATTCtAAA TATGAAAAA TGGCTGAGCA TCGTTTGATG AATCATGATT 420
 TATATCCCGA AAAAATAGAT AATCGTTAAA TGTATCATTT AATAAACACA CCAATAAGTT 480
 20 GATTTTCCTA ACtTATTGGT GTGTTTTTCA TTTAGCATAC ATAATAGGTT ACATTAAAAT 540
 AACATTTTAT ACCAAAGTAC ACCAAAAGAA TATTAGTACA CGAATTAAAC AACATTTTtA 600
 TAGAAACCTA TTGCACTTTA ACGTCAATAA GTATATTTTT ATATTATCTC TAATTAATTG 660
 25 TGCGCGCTTA ATAACAGAAT ATTCTCAATA TTTTtATTTT TTTGTGATTT GTTGGAATAT 720
 TTAGTTGATA AGGCACAATC AAATTTACTT AACTATTGT ATTAGGGGAA GAAAGGATGG 780
 GATGTATACA TGACACAACA AAACtCCCAT GGAAATCAAA TTCAAGACAT ACCTCAAACA 840
 30 GGATTTTTTCG GGcATCCTCG AGGACTAGGC GTACTCTTCT TTGtAGAGTT CTGGGGrAAGG 900
 kTTAGTTATT ATGGGCATGC GTG 923

(2) INFORMATION FOR SEQ ID NO: 851:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 1004 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 851:

45 TTAnTTGCAT CTATTTcAGT TGGTGtAAAG AAAGCGGAAT TTGATTTTAT TGAAAAGTTA 60
 GCTcAAGAAA AATTAATCCC CgAATATATT ACAATAGATA TTGCGCATGG TcACTcAGAT 120
 TCaGTGATAA ACATGATTAA ACATATAAAA ACCCATATAC CTGATAGTTT TGTTATTGCT 180
 50 GGTAATGTTG GTACGCCAGA AGGTGTTAGA GAATTAGAAA ATGCTGGTGC TGATGCTACC 240
 AAAGTCGGTA TAGGTCCTGG TAGAGTTTGT ATTACAAAGA TTAAAACAGG TTTTGGTACT 300

GCCGATGGTG GTATAAGAAC GCATGGCGAC ATTGCTAAAT CAATTAGATT TGGTGCATCA 420
 ATGGTCATGA TTGGTTCATt WTTTGGCGCA CACGAAGAAT CACCTGGTGA AACTGTAGAA 480
 5 CTTGATGGTA AACAGTATAA AGAATATTTT GGTAGTGCAT CTGAATTTCA AAAAGGCGAA 540
 CATAAAATG TAGAAGGTAA AAAAATGTTT GTAGAACATA AGGGTTCATT AATGGATACC 600
 TTAAGAGAAA TGCAACAAGA TTTACAAAGC TCAATTTTCAT ATGCCGGTGG AAAAGACTTG 660
 10 AAATCATTAC GTAGTGTAGA TTATGTTATT GTTAGAAACT CTATTTTCAA CGGTGATAGA 720
 GATTAAATATT TATAGTAGGT GAKGTAAATT AAAAATTCA TAGTAACTGT TGTTCGTTT 780
 15 TTATCAATTA TTATCATTGC GCCanTAACA GAATTTAAAC CATTCAATCA TTTACAAAT 840
 GAAGTAAGAC AATATATTGA CATTACATC AATAAGAAA CAATTTCTGC GGAAATATAA 900
 TTGGATACAC CGAAGAAACA ACAATTTGCC TTAATAATA TACAAATGAA CATGTCGAAA 960
 20 TCAGATGTTG AGAAAACATT AAATAACCA AAAAGAGTGA CATn 1004

(2) INFORMATION FOR SEQ ID NO: 852:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 852:

GTTCGCTCCA ATGTACGCAG TTGTATATGC ATAGACACCA AAATCGAACC ATTCCATTGC 60
 ATTACCGATA CCGGTTGCAA CAACGGTTTT TTTAGCTTTC TTGTCATCCA CCATGTTAAT 120
 35 ATTCTCTTTA TAAAATCCA TGAATTCATA CACTCCCTCT TGTATGTTTC ATAATTATAC 180
 GGAGTTAATT AGTTTTGTCA AATTTATAAG AATTTAACT TTTATATAAA TACCAAAGTA 240
 40 TGTTTGTTC AAAATTTTCG TTTATCGnAT TAAATTCATG GTTTTATACC TCATACATTG 300
 ATTAGACATA ATAATCTAAA CACGACGTTA CTTGGATAT ACTnAATGGT nncACACTCA 360
 GTAGGAAGCA CGCATTGCT CGATAATGTA ACCATACTCA 400

(2) INFORMATION FOR SEQ ID NO: 853:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

GGTGAAATTG TAACTATATA ATCGATATTA CCTTCAGTGT TCAAACTGG AAAATAATAA 60
 TTACCATCAC TCITTTTGTG GAATTTATAA ATTTTAAAAG GTTCACCAAG TGTATACGAG 120
 5 GCTTCTCTT TATTATAGAT TTTATCAAGT GAAGTAACAT AAGAAAGATA GTCTTTTGTG 180
 GCTAAATTAC GTACGTCAGT AGGAACACTC TTGTCCTCGA CATTAACTG CACATGCTTC 240
 TTATCTTTTG CTITGATATT TGAATTGCTC TCAGCGTTTG CAATAGGGGT AACACTTAAA 300
 10 GAAATATTA AACTTAAAGC TATTAATTTT GGAAAGTTTC TTTTCATATA AAAACTCCTT 360
 T 361

(2) INFORMATION FOR SEQ ID NO: 854:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 605 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 854:

ACnTTATACT AGAnAAAGnT ATTAAAGTAT ATCTGCTTTA CACCATTAAA AAGCGGCAAA 60
 TGCTATAGAT AATCTAAAGC ATCTGCCGTA TGAGnATTTA TTTATTTTGT ATTGTCATAA 120
 TCGTGTGGTT TTAAATTAAT TGTTTCTAGC TTTACAAATT TTGTTTTGTG AATGATTTTA 180
 30 TGAATAAAGT AAATCAACGC TAGAATGATT AAAGGTAAAA AGTTTTTAAA AGCATTTAAC 240
 CATTGATCTT TAAAAATATA TTCAACTGAG CCACCAAATA GCAAGAATAA TAGTGTAGTG 300
 ATGACAATGA TTGGTCCTAA TGGATAAAAA GGTGCTTTAT ATGGTAGGAC CTTATTAGGG 360
 35 TCTTGACCTT GTTTTTTAAT AGCTTGTCGC AATCGTATTT GTGACCAAAT GCTTGATCCC 420
 CAAACAATA TAATCATTGA ACCAATAATT TCAAGTAAAT TAAAAACGGC ATTTGAATTA 480
 40 AAGTTTGCAT AAATAATAAC AATAACAACG ACTGCATAAG TAGTTAATAA TGCTCTTAAA 540
 GGTAACCTAG TTGTCTTGT TAATTTACTT AAAAATTGGG GTGCTTTTTT GTCTGAACCT 600
 AAGGA 605

(2) INFORMATION FOR SEQ ID NO: 855:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 515 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

TTGAACAAGC ATTTTAAAT AGTCAACAAC ATCAmGCAAT TAGTGAAGAG GCACAAC TTT 60
 TAAATAATCC AGATGAATTA ATGGCATT TTT TAAAGAATAA GCGTAAAAAT ATTTTAGAAA 120
 5 ATGCATACAT TATGCCGCAT AATATGAGAG AAATGTTACG AAGTTATTTG GAAAGTATGT 180
 CTCAGACTT TAATGTTGGC GGATTTTTTA ATAAAAAGAA GAAAAA ACTA CAAATTCAAC 240
 AACAGCGATT ATTAACAGCG ACAGATGCGT TACAAGAACA TGTTAATCAA CAAATTCGTC 300
 10 AACCAATGCG AGAAGATATG TCATTGTGTTA CGCGTTTTAT CAATAAAAAA GmAGCTTCAG 360
 aTAmAGTATT AAATCAGCAT TATGACGTTA AGCCAGAAAT GATTGAAGGT TTATATCAAC 420
 15 CACAAACATC AATCAGCAAT ACTTATGTAC TTACATTTTC AGACGAAGTG GTTAAAGCCA 480
 TTAAGAAATA TGTTGAACAA CAATCAACAC CAATT 515

(2) INFORMATION FOR SEQ ID NO: 856:

20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 1607 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 856:

30 GTCATTTTAA AAATTCGCA TTCGCGTTTA ATTTTTCTC TTTTCTCTT TTCTTCTAGT 60
 GACATACTTT CTTTAGGTGT TTCAACCAAT TCAGATGTAT CTACATCATC AATTTTAGTG 120
 ATTTTGTCTA CATCTTCTT TAAATCTTCT GGGACGTTCT CGAAACGCTT ATATTGCTCT 180
 35 TTAGAGATAC TAGCAGCTAT TTCATTAGCT CCTAAAATTT CATCTATCAA GCCGAAAGAC 240
 AAGGCTTCTT CTGCAGTAAG CCAAGTTTCT GCATCTAACA TCTGTTTTAA GTGTTCTTGA 300
 TCTAAATCTT TTGCTTTATC TAAATAAGCT GAATTACTAA CAGCATCTGT TTTTCAAGT 360
 40 AAATCCGCTG TCTTCTTAA TTCTTCTGCA TTACCTACAG TCATAACCCA TGAATTATGA 420
 ATCATTAATA AACTATTTT GTGCATAAAA ATAGTGTCAC CACTCATAGC GATAACACTA 480
 GCAATTGATG CCGCTAAGGC ATCGACATAG ATATTAATTT TTGCAGGATG CATTTT TAGC 540
 45 ATATTGTATA TTGCATGTCC TTCAAATACA CTGCCTCCAG ATGAATTTAT ATGAACATCT 600
 ATTTCACTGA TGTCTCCTAG TTCATCTAGT TTATTTTGA AATCTGTAGC AGTTACATCA 660
 CTTTCAAACC ATTTATCACT TACAATATCA CCATAAATGa ATATTTCAACC TTTACTTTTT 720
 50 GATTTTCTTT TCATTGAAA AACTTAGCT TTCATTGACA TTTTATCAC CACCTTTCaA 780
 AGATTTTCTT AATTCAAGTG GCGTGTCAAT TGGGTATAAA TCACCGCTTA ATTAGCGGCT 840

55

AACCCTACG AACTGCTTTA AAGTACACTT CTGCTTGTGT TGCCTATCA GCCCTTAAAT 960
 AAGATTTAAC GTTAAATTTA AAATACCTAT TTTTCTCT GTCTGTTTGA GTAAGTAGTT 1020
 5 TCCGATTAAa TTCTTCTTCA TACTGTTTGA CGATTGGCAA TAAGGTATGC TGCAAGTAAA 1080
 ATCTGTTTAA CTCTTCATTT TTCGCGAAAT TTGTATTTGA TCTTGCATTT AAGAATATTG 1140
 10 AGGGCAATTG AAAAACGTTA GCTACTCTTT CTCTTGTTAA ATTCTCGCTT GCCACTATAT 1200
 CTCAGAGAC ATATTTTTTTA GGTAAAGGTT CGATTTCAAC ACCAGGCTCT TGGAATAATA 1260
 TTCCACCGTT TTCTTCATAG TACTGTTTGA AATCTTCTAA CACTTGTTGC CTTTTTCTG 1320
 15 TACTTACATT GGAACCATAT TTAAGCATAA AAGAATCTGG TTTTGCATT TCTGTAAGAT 1380
 TAAAGGTTCT TACTGCATTG TCAAAATCAG TTGTATTCTT CAACACATCA ATCGGACTAA 1440
 TACCTTGAAC CATATTAGAT GCCACGATGT GTTTAAATG CAACATGTCC aTATTATGAA 1500
 20 CAATCAATTT ATTTCCAGTT GCAGCATGAA TGGAATAATA AAGTTCACcG TGATTGGTTT 1560
 TCAATTAACA TTTCAACAAC ATCTGGATTT AATAAGAAAA GCTTTGA 1607

(2) INFORMATION FOR SEQ ID NO: 857:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 346 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 857:

35 ATGCGCATTT AACCGCATTT AGAGATGCTG AAGATCAGTA TAAAGCTTTG TTAGAAATTA 60
 CAACATTACC AGAAGGTAGA ATTTATGTTG CTCGCCAAGA TCAACTCATT GTGGGTTATG 120
 TCACTTTCCA CTATCCTGAT GAAATTGAGC GCTGGTCTAC AGGTAAGCTT CCATATTTAA 180
 40 TCGAATTGGG GGCAATTGAA GTCAGCATCA ATTTTAGGCA ATTACAACTT GCAGAAAAGC 240
 TGATACAACT TAGCCTTCTA CACCAGAATT CGAGAATTAT ATCGGnATAA CTACAGGATA 300
 TTACCGGCAT TGGGGGTTTA AAAAATTCCC AGTnAGAGGT ATTnCC 346

(2) INFORMATION FOR SEQ ID NO: 858:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 1176 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

EP 0 786 519 A2

	ATTACTATAA TGAATCTTGC GAGATATTTA GAAGTAATGA TACAAnATAA TGGACTTTAG	60
	AATTTmAATT TACAATAAAT AGTTCTATGA TTAAATGTCA GTTTTATGAC ATTTATTTAT	120
5	TGAAAATACG AACGAATGaG CGATaTGATA ATATAGATAA GAATGATTTT AATTTAGGAG	180
	GCCTTTATGG TGCATAATAA AAACAATACA ATTTTAAAAA TGATCAAAGG TGAAGAAACA	240
10	TCACATACAC CTGTTTGGTT TATGCGACAA GCTGGCCGTT CGCAACCAGA ATATCGAAAA	300
	TTGAAAGAAA AATATTCACT ATTCGATATT ACACATCAGC CGGAGTTGTG CGCTTATGTA	360
	ACACATTTAC CAGTTGATAA TTATCATACA GATGCAGCAA TTTTATACAA AGATATTATG	420
15	ACACCATTAA AGCCAATTGG TGTCGATGTA GAAATTAAAT CGGGTATTGG TCCAGTGATT	480
	CATAATCCAA TCAAAACAAT TCAAGATGTT GAGAACTTT CTCAAATAGA CCCCGAACGA	540
	GATGTACCAT ATGTATTAGA TACAATTAAA CTTTTAACAG AAGAAAAGTT AAATGTGCCG	600
20	CTAATAGGAT TTA CTGGGGC ACCATTTACA TTAGCGTCAT ATATGATTGA aGGCGGACCA	660
<hr/>		
	TCGAAAAATT ACAATTTTAC AAAAGCGATG ATGTATAGAG ATGAAGCAAC ATGGTTTGCT	720
	TTAATGAATC ATTTAGTTGA TGTATCTGTT AAATATGTAA CAGCTCAAGT CGAAGCAGGT	780
25	GCCGAATTGA TTCAAATTTT CGATTTCATGG GTAGGTGCAT TAAATGTCGA GGATTACAGA	840
	CGTTACATTA AACCACATAT GATTTCGATTA ATCAGTGAGG TTAAAGAAAA ACATGATGTG	900
30	CCGGTAATTT TATTCCGTGT AGGTGCCAGT CATTTAATCA ATGAATGGAA TGATTTACCG	960
	ATTGATGTAT TAGGCCTAGA TTGGAGAACG TCTATTAATC AGGCTCAACA ATTAGGCGTT	1020
	ACTAAAACAT TACAAGGGAA TTTAGATCCA TCAATTTTAT TAGCACCATG GAATGTCATT	1080
35	GAAGAGAGAT TGAAACCAAT ATTAGATcAA GGTATGGAGA ACGGTAAACA CATCTTTAAT	1140
	TTAGGACACG GTGTATTCCC AGAAGTGCAC CAGAGA	1176

(2) INFORMATION FOR SEQ ID NO: 859:

- 40 (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 621 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear
- 45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 859:

50	ATTTGGTGCA TTGGTAnAAT TGACCTGAAA GnAAAAAGTG GTTTAGTTGC ACATTGAGTG	60
	nAAGTGCGCA GATGAATTAT GTTGAAAACG TGAGGAAGAG CACCTTTGCT GTTGGTGATG	120
	AAGTAGACGT AAAAGTATTA TCTATTGCTG ATGATGGAAA AATTAGTCTT TcAATTAAGA	180

55

EP 0 786 519 A2

AAAAAGCCGA AGATTTTGAA AAGAAATTAA GCAATTTCTT AAAAGATAGT GAAGATAAAT 300
 TAACTTCAAT CAAACGTCAA ACAGAATCTA GACGCGGTGG CAAAGGTTCA AGACGTTAAT 360
 5 TAAAATAAAT AAAGACTGTT TCGATAAGGA ATATATTTAG AATGATGCGT ATCGAATAAT 420
 CGATTGCAGC GTTAGACAAT CTAAGACTGT TTCTTAAATA AGGAGCAGTC TCTTTTATTT 480
 10 GTAATGATAT AACTAAGACT TATACCATT TTGAAAATTG TAAAAGTGAG GTGATGTTAT 540
 GCAGTTAAAT AGTAATGGTT GGCATGTTGA TGACCATATT GTTGTCGCTG TTTCTACAGG 600
 TATTGATAGT ATGTGTTTnn T 621

(2) INFORMATION FOR SEQ ID NO: 860:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 544 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 860:

25 TATATTAGGT ACTTGTGTTG GTATTGTGCC AGCTTTGCTG TCTACTATAA TTTCTAAAAG 60
 GTTTGAACAT ATAAAAGGGA AAGTGCTAGG TGTATTTAAT TTTGTGAGAT ATATTGGAAT 120
 30 GACTGTCGGT GCATTATTAA TTGGTATCAT TTCTCAGCCG TTGGTAGCCT TTTACTTCAC 180
 AACTATAACT ATCATGTTAA TAGTAATATT TCTTTATATA AAGATAGTTG ACTTTCAGCT 240
 AAAGTATGCC AAATAAATT AAAAAGCAG TGAATCATTT CAATAGATGG AATGATTCAC 300
 35 TGCTTTTTGT TTATAGAAAT TTAAATTCA TGCTTTATG CTAACAACAA TATTATTTTA 360
 CTCTCTTACG TTGCCAATG TAACCGTATA GCAAAGTAAA TGA CTGCGAT AATGATGACA 420
 ACATACATAT ACGTGAATAG GAAGGAAGAC CAGTCATCAA CATACCAAAG CTATCGCTCA 480
 40 AAGTGCGnCT GGTAAATTAA ACCGAATTCC AnGATTGTAG GAACCCnATT AATGGAAATA 540
 ACGG 544

(2) INFORMATION FOR SEQ ID NO: 861:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 651 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 861:

AATTAAAAAT ACATTTATGC TTTACCCATT CGAAAATACC TTAATCATTT TCATTTATAG 120
 CATTGTTTGA TTGAAGGATA AAAAGTTGTT GTTTACAATA AAAATAATGA GTATCTGAAA 180
 5 TGAGGGATTTC AnTATGACAC ATGTGGAAGT AGTAGCGACT ATCGCGCCAC AATTATCTAT 240
 CGAAGAAACT TTAATTCAnA AnATTAATCA TCGTATTGAT GCAATAGACG TATTAGAATT 300
 ACGAATTGAT CAAATTGAAA ATGTCACAGT TGaTCAAGTG GCAGAAmTGA TTACAAAGCT 360
 10 GaAGGTTATG CAAGATTCAT TCAAATTATT AGTTACGTAT CGTACAAAGT TACAAGGTGG 420
 CTATGGGCAA TTTACAAATG ACTCGTATCT TAATTTAATA TCAGACTTAG CAAATATCAA 480
 15 TGGCATAGAT ATGATTGATA TAGAATGGCA AGCAGATATT GACATTGAAA AACATCAACG 540
 AATCATTACA CATTTGCAAC AGTATAATAA AGAGGTGGTT ATATCACATC ATAATtCGA 600
 AAGTACGCCT CCATTAGATG AATTGCaATT TATATTTTTn nAAATGCAAA A 651

(2) INFORMATION FOR SEQ ID NO: 862:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 401 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 862:

TGTGAGTGGT AATGACACAC AAGCAGATTT AATAGGTTAT AGTTTTAAGT TTGACGGTGC 60
 GATTTCAAGG CAAGAGGCTT CTAAAGATGT ACATGCAGTT ATATTATCGA ATAAAACACT 120
 35 ATATTTATTA GATGTATTAC AAAAATTACC GATAGATAAA ATGAATTCAT TGAATATCCA 180
 TCAAGAAATT ATTGATGAAA TGTCAGATAT CATTTTAATG TTATATCGTG AATATGCAGG 240
 TATGTTTTTTT AAAAGTCAGA AACTAATCAA CCAATTAAAA AGATTGGAmC AATAACaTAA 300
 40 AATAATAAAa GGTATTCAAG TAGCCACATA GATGTGTTTA TTTGAATACC TTTTkGAATA 360
 GaaAAGaGAT ACTGGCaATT TTAATAACCA GtATCTCTTT T 401

(2) INFORMATION FOR SEQ ID NO: 863:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 863:

ACAAAGTAAT CAATATGTAA TATAAAATAC ACTGGTACTC AATATATAAT GATGATAAAA 120
 TTAATTTTAA TTAGATAGAG TTGCTTTGTG TTTTAAACGC NGATGCTACT ACTTATCTTA 180
 5 ACAGTTGATT AAGTAAATCA TTTAACAGCG AGATTATnCA ACCAGGGGGA TGACTTAAATG 240
 AATTATTCA GACACCAAAA TTTAGTATCA GAAATTTAAT GTCGGTATTT TTTCAGCTTT 300
 AATGCCAC 308
 10

(2) INFORMATION FOR SEQ ID NO: 864:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1827 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear
 15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 864:

TTCTACATCT TAAACGATGA CCTAACTATG ACGTTAATCT GGAAAGATGG GGAGTTGCTA 60
 GTATGATGTT GAAATTTAAA GCTTGGGATA AAGATAAAAA AGTTATGAGT ATTATTGACG 120
 25 AAATCGATTT TAATAGTGGG TACATTTTGA TTTCAACAGG TTATAAAAGT TTCAATGAAG 180
 TAAACTATT ACAATACACA GGATTTAAAG ATGTGCACGG TGTGGAGATT TATGAAGGGG 240
 ATATTGTTCA AGATTGTTAT TCGAGAGAAG TAAGTTTAT CGAGTTTAAA GAAGGAGCCT 300
 30 TTTATATAAC TTTTAGCAAT GTAAGTGAAT TACTAAGTGA AAATGACGAT ATTATTGAAA 360
 TTGTTGGAAA TATTTTTGAA AATGAGATGC TATTGGAGGT TATGAGATGA CGTTCACCTT 420
 35 ATCAGATGAA CAATATAAAA ATCTTTGTAC TAACTCTAAC AAGTTATTAG ATAAACTTCA 480
 CAAAGCATTAA AAAGATCGTG AAGAGTACAA GAAGCAACGA GATGAGCTTA TTGGGGATAT 540
 AGCGAAGTTA CGAGATTGTA ACAAAGAACT GGAGAAGAAA GCAAGCGCAT GGGATAGGTA 600
 40 TTGCAAGAGC GTTGAAAAAG ATTTAATAAA CGAATTCGGT AACGATGATG AAAGAGTTAA 660
 ATTCGGAATG GAATTAAACA ATAAAATTTT TATGGAGGAT GACACAAATG AATAATCGCG 720
 AAAAAATCGA ACAGTCCGTT ATTAGTGCTA GTGCGTATAA CGGTAATGAC ACAGAGGGGT 780
 45 TGCTAAAAGA GATTGAGGAC GTGTATAAGA AAGCGCAAGC GTTTGATGAA ATACTTGAGG 840
 GAATGACAAA TGCTATTCAA CATTCAGTTA AAGAAGGTAT TGAAGTTGAT GAAGCAGTAG 900
 50 GGATTATGGC AGGTCAAGTT GTCTATAAAT ATGAGGAGGA ATAGGAAAAT GACTAACACA 960
 TTACAAGTAA AACTATTATC AAAAAATGCT AGAATGCCCG AACGAAATCA TAAGACGGAT 1020
 GCAGGTTATG ACATATTCTC AGCTGAAACT GTCGTAAGTCG AACCACAAGA AAAAGCAGTG 1080
 55

AGTGGTGTAAGTAGTAAACGTATTTAGTGATTGAAACAGGCAAGATAGACGCGGGATAT1200
 CATGGCAATTAGGGATTAAATCAAGAATGATGAAGAACGTGATGGAATACCCTTTTTA1260
 5 TATGATGATAGACGCTGATTAGAAGATGGATTAATAAGCATTTTAGATATAAAGGT1320
 AACTATGTACAAGATGGAAGAGGCATAAGAAGAGTTTACC AAATCAACAAAGGCGATAAA1380
 10 CTAGCTCAAT TGGTTATCGT GCCTATATGG ACACCGGAAC TAAAGCAAGT GGAGGAATTC1440
 GAAAGTGTTCAGAACGTGGAGCAAAAGGC TTCGGAAGTAGCGGAGTGTAAGACATCTT1500
 AGATCGAGTTAAGGAGGTTT TGGGGAAGTGACGCAATACTTAGTCACAACATTCAAAGAT1560
 15 TCAACAGGACGACCACATGACATATTACTGTGGCTAGAGATAATCAGACGTTTACAGTT1620
 ATTGAGGCAGAGAGTAAAGAAGAAGCTGAGCGCAAATACGAGGCACAAGTTAAGATAAGG1680
 AGAGATGGAGATGCCAAAGA AACCGGTAACGATTGATGTA GATGAAACTTATTAGTAGT1740
 20 AGCTAGTAATGAAATATCAGAACTATTATATGAATATGACAGTGAGTAAATGTCAGCTGG1800
 ATGGAAGATGCGGATAATAGGGATATC1827

(2) INFORMATION FOR SEQ ID NO: 865:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1379 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 865:

35 TCAATTGCATCATCATATGA AATTCTaGGG AATGGTGTGCAACTTTTTTC AAGTTTTGAT60
 GTATCACGCTCTAAAATTTTCAACTCTAGTTTACAATTTTCTAAAACCTGATTTTACAACA120
 TGTGTTACATATTGTTCTTG AATTTCTAAA CTTTCAGCATGATTTGTGAAAGCCATTTCT180
 40 CCTTCAATCA TCCAGAACTC GATCAAGTGTCTACGTGTTT yTGATTTTTTC AGCTCTGAAA240
 GTTGGACCAAATGAAAATAC TTTTCCGTGTGCCATTGCTGCAGCTTCTAA GTATAACTGA300
 CCACTTTGAGATAAAAACGCATCTTGATCAAGTATTTAGTATGGAATAATCACTTTGTA360
 45 CCTTCTGGCGCACTTGCTGTCAAAATTGGTGGATCAACCTTTGTAAATCCATCTTTGTG420
 AAAAATTCATACGTTGCACGAATAACTTCA TTTCTAATTTTCATTACAGCATGTTGTTTT480
 50 TTAGAACGTAACCATAAATGACGGTGATCCATTAAGAATTCTGTACCATGATTTTTAGGT540
 GTAATCGGATAGTCATGCGCTTCTGAAATACTTCAATTGATTTCACTTGATTTCGTAT600
 CCTAAGTCAGAACGATTATCTTCTGTAATTGTGCCTGTAA CGTATAGAGATGATTCTTGA660

TGCATAAAGC CTGTTCCATC ACGTAATTGT AAAAAGGCGA TTTTACCACT TGAACGTTTA 780
 TTTGTTAACC AAGCACCAAT TGTAACGTCT TGGTTTAAAT GATCTTTCGC TTGTTTAATC 840
 5 GTTGTTTTCA TAACCATTCT CCTATTTATT TTTTCGKTAT ACAATACTCA TTCATTTTAA 900
 CAAAATCCGC TTTCAAGTTC TAGAACTAGA CTAAAAGATA ACGtGTAAAT GGTAATGATT 960
 10 TACGCACAGA TTTGAACATT AATTTATATT AAGACAATAC AATCATCAGT TTCAGACAAA 1020
 ATATATAATA AAGCCTCAAT ATTATTAGTA TGAAGGTCGT TTTTGTnCT AACATTCAAG 1080
 TTTAATTATA AAACTCAAAT TTTGACGACC AAACAAAAT TCTTGTAACA GAACATAGCA 1140
 15 CATGTCATGT CACAAGAATT TTACTTTGTA TTTCACTTTT TCTTTTTTTG AATTTGTCTT 1200
 AATAATTTTC CAAACTGTTG AATGTCGCCT TTTTCTGAC GATAATTTTC AAGTGTGTTG 1260
 TCAAAAAGT TTTTATAATT ACTGTTTATG AGTCGATCAT CAAATGAAAC TATTATGCCG 1320
 20 CGATCATTTT CATTTCTAAT TAATCTTCCA AGTCCTTnGT CTAnAACGTG TAACTGCAT 1379

(2) INFORMATION FOR SEQ ID NO: 866:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 450 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 866:

TTACAACGAA TAGTTCACCG TTCGAGTCTA ATCTATGTAA TGCTTGCTCG AATATACGAT 60
 35 GCACGGTTTC TTTCCCTGCT CTTATTGGTG GATTGGTTAA AATAAAATCA AAACTTTGT 120
 CTTCCACAGC AGACAAAGCA TCACTTTCCT TTACGATCAC ATTATCAATA CCATTTAATT 180
 TTTTGTTTTT TTCAACTAAG GCTAGCGCTC TGTGATTAAAC ATCTAGCATT GTAATTGAAT 240
 40 GATGTGGTGA TACTTTAGCA ATCATCAAAC CAATTGGTCC GTAACCACAA CCAACATCGG 300
 CAATTCGCTT ACTTGGACCA GGTGGATGCG CTTTTAAAAA AGTTGAACA AGAACATCTG 360
 aACCATAATC TACTTTAtCt TTCGAAAACA CTCctTATCA GTTATTAAAT CAATTTTATG 420
 45 AnGGTtnTAA TTGGATATTG AGTACGTTGT 450

(2) INFORMATION FOR SEQ ID NO: 867:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 867:

5 AATGTTAACA ATATAGCACC AATTAACCCC GACATGATAA TAACGTGTAA TGTTTTATTT 60
 CCTATTAATT GTCTCGCAAT ATGAGGTGCA ATTAATCCTA AAAAGCTAAT ACCACCGACA 120
 ACTGAAATTG CGGATCCTGC TAATATTACT GCTAAAATTA ACAATAGCAT TTTAATAGTT 180
 10 TTAACITTTA AACCGAGTGC GGTGCAACA GCATCACCTA GATTCAATAC ATCTAATTGA 240
 TAACTCCATA AAATGATGAT GGATCGTTAT TAAAACCAGG GAATATAGAT AATATCCGCA 300
 TATCAGGCCA TATAGCTACC TGTCACCAAC AGGTTTnTGC TCCAnGGTTC TnTAATAAGA 360
 15 CGCACACGCG ACAATGCGCT TGCTACCATT AGGCAGCTTG 400

(2) INFORMATION FOR SEQ ID NO: 868:

(i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 1132 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 868:

25 AATCCnTnAA GTGCCATAAC ATCATCTCCT AACATCTTTA TTATACATCA ACATTTTATA 60
 30 AAAATAACnT CTTATGATAA AAATGAAAAT ACTAATTTTA ATGAGAGCGT CTTAAGCCGC 120
 AATTGATAAA ACATATGCTA CAATATTTTT AAACACTATA CAGGAGGTAC TCTATGACAA 180
 AATATACATT TAAACCTAAA GATTTCAAAG CGTTCAACGT AGAAGGCTTA GACGCACGAA 240
 35 TGGAAGCTTT AAACGAATAC ATACGaCCAC AACTCCGTGA ATTAGGAGAA TATTTTAGTG 300
 ACTTCTTTAC AAGTCAAAC TGTGAAACAT TTTATCCTCA CGTAGCAAAG CATGCTAGAA 360
 GAAGTGTGAA TCCTCCTAAA GATACATGGG TTGCTTTTGC AACAAACAAA AGAGGCTATA 420
 40 AAATGTTACC TCATTTCCTAA ATTGGTATGT TTGAAGATCA ACTGTTTGTT ATGTTTGGAA 480
 TCATGCATGA AGCAAAAGAT AAAGCAACaC GTGCAAAAGT TTTGAAAGA AAATTTAAAG 540
 CTATTCAACA ATTACCTGAT GATTATCGTG TTTGCTTAGA TCATATGAAA CCTGATAAAC 600
 45 CATTTATTAA AGATTTAACG GATGATGATT TAATAGAAGC GATACAAAGA GCCATCAATG 660
 TGAAAAAAGG TGAATTCCTT ATAGCGCGTG CAATCACACC ACAAGATAAA AGATTAAAAA 720
 50 GTGACAAAGC ATTTATTGCA TTTTGAAG AAACCTTCGA TCAGTTCTTA CCATTTTATT 780
 CTGCATAAAT AACTTTGTTT AAATAATAGA GCACTTAATC ACATCCaTGA TTTCGTGctC 840
 TtTTTTCTTA ATATTAAATC GAACGTtCAA CATAaTAATT CATACTTTTA AAAAAATTAA 900

GGTGAGTCAA AATGAATAAT AAACGACATT CAACAAATGA ACAATTAAGT TTAGACGAAA 1020
TAAACAATAC AATTAAATTC GATCATCGCA GTTCAAATAA ACAGAAATTT TTATCATTTTC 1080
5 TTGGACCTGG GTTATTAGTC GCTGTTGGTT ACATGGATCC CGGAAACTGG AT 1132

(2) INFORMATION FOR SEQ ID NO: 869:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 869:

CTCAATGTAT TGACTGTGAT TTGGAGTGTA TAATGCTACT GTTTTGTCTA TAGCCATCGC 60
20 ATCAAATATT ATATTGAGT AATCAGTGAT AACGACATCA GACATTAGAA TTAAGTCTTG 120
AGCACTAAGA TACTTTGGTG CAACAAGCGC CTCCTCTGGT AAGATCGCTT CATCAACACC 180
CTGAACCACA ACATGATAGG CTTTGAATAA AGCATCTGAT AGTGGTAATT GTTGCGCACT 240
25 CACTAATCCA ATAGGTGCGT ATAATAAAAC TGGTTTTTGA TCATTTATTT TAAACGATTT 300
CTTATACTGT TGTTGAGTAG TACTTTTCGTT ACTCTTTTGT AGTAAATATT GGTGTTTAGG 360
ATTACCATAA GCCAATACAT TGCTTGGTGA CTAGGAAAAG nCGTTTGATA AAAGGGCT 418

(2) INFORMATION FOR SEQ ID NO: 870:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 587 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 870:

GAGTnTGTTA CAGTAATTGA TTTTATTGGT AATTnTAAGA CAAATTATTT AATTCCGATT 60
GCGCTTTCTG GGGATCAATC GCAAnATAAA GATAATTATA AGAAGTTTTT AACGAATAAC 120
45 GATTCGATTA ATGGAGTATC TACAATTAAT TTTGAAGAAG TTGCTAAAAA ACAGATTTAC 180
AATTCATTGG ATGCAGTATC ATTAAATCAA AATAAATTAA TATTAAAAGC TTATGAAGAA 240
50 GTTGAAAATA GATTGGGACA CATGCCGTTA CTAATGGATT TCATACAACA ACATTCTATA 300
GATCCAAGCG TTATATTTTC TAAATTTAGT AATTATTACG AGTTCTTAGT GAGATATAAA 360
AAAATAGATA CATTATTGAC GGAAAATGAA TCTAAAAATC TGGTTTTCTT TTCAAGGCAA 420

TTAACATATG ATGAATTAAA AAATAAAATG TTGAACGAAG TTAAGGATAT AACAGAAGAT 540
 GATATAGATA CTTCATTAAAG AATTTTAGAT TTTTCATTTT ACAACGC 587

(2) INFORMATION FOR SEQ ID NO: 871:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 971 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 871:

CTACTAAACC AGGTAATCGG TAGAATCCAA GCAGGAATAA ATAAATTAAT GCnACACCAA 60
 TAAACGATGC AAACACAGTh TTATCTAATG CATCTTGACC AAATTGGGCA CCTACTGAGT 120
 TTGAATAAAAT TTCTTTCAAG TCAACTGGTA AAGAACCTGC ATTTAACAAT KCGGCGATTT 180
 GTTTTGCTTT TTTAACGCCT TCTTGTCTT TAAATCCACC CGAGATTTCT ACgCTATCAG 240
 AATTGATTGG TTGATCAACA CTTGCTGCAG AAATAAATTT AGGGTTTTTC TTTTGTGCTT 300
 CTTTTTTATA GCTGTACCT TTTTTGAAAT CTAACCAAAC AACCATGACA TTATCACGTT 360
 TCTTAGAGAT TTCTCCGTT ACTTTTTTAA ATTTGTTTTT GTCTTTTACT TTAAAAGTAA 420
 CTGTAGGcTG GTTTGTTTCC tGtTTAAATT CTTGtTTGGC AGATCCCTGT TTaATATCAG 480
 AACCGCTTAA TTTtACTTTA TCTTCTGCAT CGCGAATTGT TAAATTAGCT TGAGAAGATA 540
 AAATTTTACG TGCTTCATTC TGGTCTGTTA CACCAGCAAG TTGTACTCTA ATTCTATTAG 600
 GTTCTTCAAC TTGAATTTTA GGTTCGAAA CACCTAAAAC GTTAACACGA TTTTCTAATG 660
 TTTGCGCTGT TGATTGTAAG GCTTTTTTAT CTATTTTGTC GCCTTTATTT AAAGGATCGA 720
 CTTGATAAAG CACCTCAAAT CCACCTTGCA AATCAAGTCC TAAATTGmCA TTCTTTATAA 780
 CACTTTTATA AGTTGcAGCC ATTCCGGCAA ACAACAATAC GACTAAAAGC AAGAACGCAA 840
 TTATTCTACT ACTTTTCTTC ACATGAACAC CTCATTATTT ACGTATGTAT TTAGAATACT 900
 TGAATACTAT TTTATAACGC AAGTGAAATC TTTCTTACAA AATTTATTAG CCTTATACAT 960
 ATTAACATAC T 971

(2) INFORMATION FOR SEQ ID NO: 872:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 636 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 872:

5 CTGGTTAACA ACATCTGGTT CGGCATCTCC TTAGCTTCCA CTAAATCTTG GATGCTTTGG 60
 nnATCTTGCG CAAGTnGTGC TTTGGCTTGT TCAATTtCTy CTTTAGTCAT CGCATTGTTA 120
 ATGCCGTTAT GACCTTGTTC AAGTATTGA TTAATACGAT CTTTAAGTGC TTGTTTTTCC 180
 10 TTATCTGTTA GATTTGGATT TCGATCAATT TCGTCAATTA ATGCTTGaAC TTGcTTATCA 240
 ACGTCTTTAT TGGCATCAAT TTTTGCTTTT GGTATTTTCAT TGGCATGCAC TTGTTCAATC 300
 GCGTGGTTGC CTGCTGTTTG AACTTGAGAT ACAGCCTGAT TACTTGTTGC TTTATTAATG 360
 15 TTGTTGATGA TGCTGTTTGC CAATTCTTCT GCTTTATTTT TCGCAATAAG CTGTCTTGA 420
 TCCGTCGCAT TTGAAGCTTC GATTTCTTTT AGCTTATTAG CTAAAGCTTG ATTAATAGAT 480
 TGAATTGCCT TGTCTTTAGC ATCTGTAGT CGTTGATCAC CATTAAAGATT ATGGATTGCA 540
 20 TCATTGACTg CTTGGATTGC GCCATTGATA TCATTCACAT tTGtGTatCA CTATTTAGCA 600
 ATGTATTTGC TAGACGTTgG CATCATCGAA GTTTGT 636

(2) INFORMATION FOR SEQ ID NO: 873:

25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 659 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 873:

35 CTCTGAATGC ATTCATTAAA CGCTGGGTCT CTTTATATGA AACGTATTTG TCATTTTTAG 60
 AACTCAATCC GTAAAAATTG TCACTTTCT TTTTAATATT ATCGTAATCA ATGGTTACAT 120
 TACTTAAATC AATATCTAAA TCTATATTTT CTGCATCTTC TTTAAAGCCC GCTATACTGA 180
 40 AAAAGCCTTC AATCGGCTGA TCAATCATTT CAATATATTT TAAAGCTGTG ATTGAACCTA 240
 AACCATGTGT TACAAAATAT GTATCCTTTT TCGGTACATT AATTGTGTTT GCATAGCTT 300
 CAATCCACTG ATCCACTGTC TTCGCTtCAG GGGATTCAAA ATTAAATAAT GTTACGTCAT 360
 45 ATCCTTCTAA AGTTAAGTTA TGCTCCAACC ACTGATACCA ATGATTTCTA CTATTTCCAT 420
 GCATAGAATG TACAATAtTA CATCTGTCAT CTCATTCTCT CCTTTCAACT TACTACTTCT 480
 TTTCTATTTT TAAAAAATG ACTGATTACC TATAATTGTA AAATAAAAAC ACCTTAATTA 540
 50 GAAATGTTAT ATCGCAAAGT GACATTTCTA ATTAAAGTGT ATTGTCATCA TTTCAATATC 600
 ATTCAAAAAC AGCTAAACCT TTGTCTCTGC TTCAATTCA CAAAAATAAT TCCCGCTGA 659

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 874:

AAAATAAAAT CCATTTTAGT ATTCTAGAGCC CCCTTTACCA CAATATGTAA 60
 ATGTATATTG TGAAAAGGGG GCTTTTATTT ATGACATAGT TGTTCAACTC ATACATTCAG 120
 TTGATAATGC AGTGCCTTAT GCAGCTATCC ACTTCATATG TATGGCGCAT ACTTGATATA 180
 TGAATATCAT CAAGATTTTA AAAGTATCGC TAATTTTAAA GTCTTAAAC GCAGATTAAT 240
 GGTCAATGATG TGTTATGCG TTTTGTTTT TAGAGCCACG TAATCCCA GGACATATAG 300
 GAGGAACCAT TCCAC 315

(2) INFORMATION FOR SEQ ID NO: 875:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 875:

TACACGACCT TGTAAGTCAG CTGCTTTATA AGCTAGGGCG ATGTTATCAA AGTTGGATGT 60
 ACTTTGAGCT TGGCATTTCG TTAATACTTT TAACGAAGGA TTTAATATAT GTCTGATACG 120
 TATATATTGA TTATATTCAA TTCTTaATTt GGATAAGATT GCTGATAATT TGAAGCAATC 180
 GGAGCTAAAT GGATCGAAAA ATGAATAAAT TTCGATTTTA CTTACAGGTG ATAGaTTGAT 240
 ATCTTCACGA CTCTTATTTT CCATTaWTCG TAATTCTCCA GCCATGTTTA TTCACCTACA 300
 ATTAATTTTA GGAATTCACC ATATGaTTAG CAGTTAATCT TaAGCGCTCA AATAAATAAT 360
 CTCCAACACC TTGTGGAAC caGCgCGaTT AATTGCTGTC TGCATATTTT CTAGCCATGC 420
 ATCTCTTTCA AATTCAGTGA TTGTAAAATC TATATGTCTT TTTCTTAGCA TAGGATGTCC 480
 GT 482

(2) INFORMATION FOR SEQ ID NO: 876:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 670 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 876:

5 ATGCAATTGA ATTCTTAAAA GCAGAAGGCT TTGATGATAT TGAATGGGGC GAAGATTTTG 60
 GTGCGCCACA TGAAACAGCC ATTGCTAATC ATTATGATTT ACCGGTGTTT ATTACTAATT 120
 10 ATCCAACTAA AATTAAGCCT TTCTATATGC AACCAAATCC TGAAAATGAA GAAACTGTAT 180
 TATGTGCAGA CTTAATTGCA CCTGAAGGAT ACGGTGAAAT TATTGGTGGA TCTGAACGTG 240
 TGGATGACTT AGAATTGTTA GAACAACGCG TTAAAGAACA TGGATTAGAC GAAGAAGCAT 300
 15 ATAGTTACTA CTTAGACTTA CGTCGTTATG GTAGTGTGCC AACTGTGGA TTTGGTTTAG 360
 GTTTAGAGCG TACAGTAGCA TGGATTTCTG GTGTTGAACA CGTTCGTGAA ACAGCGCCAT 420
 TCCCAAGATT ATTAAACCGT TTATATCCAT AAGTTTTAGG GTCGTTACTT AAAATATATA 480
 20 TTATGATAAT AAAAAGAATC GTCCAGCCTA TATTAATAGC TGGGCGATTT ATTCTTGGAA 540
 AATGAAGATT GATAACGGCT TATATTAATC ATGAACAAAC TTTTGTTTAG TAACTATATT 600
 TGGAAAATAA ATAGTTCATC TGATTATCCA TAAAGTTCAT TGTAAAATC TAGTGTTAAA 660
 25 AAATACTGTT 670

(2) INFORMATION FOR SEQ ID NO: 877:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1258 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 877:

TGCAAAGTAA ACTGGATGGC TnTCTTGCCG CCAAGGATCT GATGGCGCAG GGGATCAAGA 60
 40 TCTGATCAAG AGACAGATCC TAACCTCTCA TTTCCGATAA GTTTAGTATG TATTATAGGT 120
 GATGATnTC TTGTTTTCAA CCTTATACAC AATATTTTG AnATTTATAT TATATTCATA 180
 TAAGGAAGGC GATTAATTAC GATTCATCAT TATATCTCTA CGTGTTAATT TATTAACCTA 240
 45 TACTATATTT ATCaCaCAA CAGTTTTTCC TTTCATTTTC AAACATAACA GAAAAGCCT 300
 GAGACATACT TAGTCCCAGA CTGTTCTATA ATTAATTAAA GATATAACAA GGTTAATCAT 360
 TCAAAGCTAA CATCACATTT ATTCACTGTA ATTTTTCATA AAGAATAATA ATGACTGTAA 420
 50 TTCTATACCT AAGTCAATTT GATGTACTTG CACATCTGAA GGCGTATTAA TTCTACCAGG 480
 AGTGAAGTTT AAAATACCTT TCACACCAGC TTGGACGAGT TCATCTGCAA CTTTCTGTGC 540

TAATTCATCG TTATCTTTAA CAATAACGTT CCCTATTTTC TGGCCAATAA CATCTTCTTT 660
 TACGTCAAAC GCTTCTGTAA TCGTCATATC GTCATGTATT GAAAAGTTAT ATGTGAGCAA 720
 5 AGCTTTCCCT AGGTTCCCAA CTCCGACAAT TCGGATTTTG ATCATGTCAC TCTCGCTTAG 780
 TTCAGATTTA AAGAAATCCA ATAACTATC TATATTATAT CCGTaCCCTT TTTtACCTAA 840
 TTCGCCAAAA TATGAAAAGT CACGACGAAT TGTtGCCGAG TCAATTTGTa ACGCATCGCT 900
 10 AATCGCTTTT GAATTTACAC GATCTATACC TTTAGATTTT AATGAACTGA CAAATCTATA 960
 ATATAACGGC AAACGTTTTA AAGTTGCTCG AGGAATTTTA ACTTGGTCAC TCATTGCTA 1020
 15 TTTCTCCTT CGTGTtTGAA TGAATTATAT CTATGTATTC AAACGAGTTA GAGCGTAATT 1080
 GTTAGATTAT TAAAArACAA ATAATTGaTT ACAATGAATA CCTAAATATT ATACATTAWT 1140
 GAATTTTAAA AATAAATATC TTAGTTTCAA GACGGCGTTT TATACTGTAA AATGGTTATT 1200
 20 AATGTAATAA TTACGCTTGT TTCATAAGTT AATAAAATTT GAGAAGACGA AGGTGAAG 1258

(2) INFORMATION FOR SEQ ID NO: 878:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 546 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 878:

30 AAACAATCCC CnCCAAAGTA ATTCCACCAC TAATTGTAA TAACTTTGA AAGGATGTTG 60
 35 TTTGThATTC CCATGGACAC ATGCCATCTn ATTTAAGTTT TATACTCTAT TTTTCTGATG 120
 TCTTGATTAA TTGCAAGCGG TCTTGCGAGC CTGTTTCAAG CTCATATTCT TTATCTACTT 180
 GCTTACCGTT TTCryTTATT AATCTTACGG TTGCGGTAAT CTTATCACCA TGTtTTTCAG 240
 40 CATCTATAAT TTGTGGTGAA CTAATCATCA TTAAACTTCC TTTAGATACA CGCTTCTTTA 300
 CATCATCATA AAAAGATGAT CCTTTTTTTA TATATGATGA TACAAAATCA AAATCCGACT 360
 GATTAAACGC AGCATTATTC GCTAAAGAAT ATCCAGCAAA GAATTCTATC AATTTGTTCT 420
 45 TCAAGCTGTT TTCTTCTTTT TCTTCTTTT CAACATAGTC TTCGATATCT TCACTGTCAA 480
 AATTCAAAGT TATCTCTGTA TTGTATTTTA AATCGCTAAG CTTTAATCGT CTTCGTCTGT 540
 50 GATGTA 546

(2) INFORMATION FOR SEQ ID NO: 879:

(i) SEQUENCE CHARACTERISTICS:

- 55 (A) LENGTH: 870 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 879:

	TTTATGAATT TTTTATGTAA CATTAAATAT TCTTCTGGCA ATCTTCctAC TATkTCTkTT	60
10	ATATATCCTT CTTCTCCTTC TTTAAATACT AAACCTGTGG GAGTTAGTGT GTTATACCTA	120
	ATTTCTATCT CATTCAAATG ATCATTCAAA AGGTCAAAAA ATTCTCTATT AAAATAACCC	180
	CATTTCCCAT TTTGTAATAA ATATTTCTTT CCATCTTCCA TTTCAACTTC TGCATGTAGT	240
15	ATCGTTTTTA GTaGCATATT ATTTGAATGC CCCAAATTAT CkATCACKTc AATTCTGACA	300
	TCATTTATAG AATTAACGTC ATATTTTAAT AAGTAATCTC CTATTTTCAGT GATGTAATCA	360
	ACTTCAGGAT CAGTCGCATC AAATGTCTCT AATGTATTAT TTTTAAAAGA ATTTATATAT	420
20	ATATTGACGT CGAGCATATC ATCTAACAAG AGTATCATAT TACTTAGTTC TAAAAATCTT	480
	GATATATCTA TAGATATATT TTCTGTAGTT GAAGAATTCG ATAGTTTTTT TAGCAATAAA	540
	GTATCTAATA CTTCTATTTT ATTCAAGTCT TTTAAAGTTA CTATTCTAGG AAATTCACTA	600
25	ATTTTTTGAG GAAGATTAAT AATAGCGTTT ATTTCTTTGA TTATCACACT AATTTTATCT	660
	ATGaATTGCT GcTTTCTATT CGGtACACGC AATGaAATAC TTGTACCACA AGTCCATTGt	720
30	TTTTCCaAAA ATTTGAGGaT TCTGTGGaTG tCCTTGGaCT GGaTATATAA GATTCTGAAG	780
	GTCTAACGTA ATCTACACTA TTCCTTCTAT AATTAACAAT CTCTTTAAGC CTGTTTTGTT	840
	GAAAAAAATT AACATTTTTA nTAACTAnGG	870

35

(2) INFORMATION FOR SEQ ID NO: 880:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 400 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 880:

45

	GGTTTACATC TTTATCAACT GTAATTTTCAAT TGACATCTTC ATTCATATTT AAAACACCAT	60
	TAAATGTCCC TGAATATTCA CTTGTTTGTT TAACTGTGGC AGTGACTTGT CGTTACCATA	120
50	TGTCATCATA TATTGTGCAA ATGTTAAAGT CCCCATGAG TTGACCGACA AAGTTGAATT	180
	TATCGAATTG TATTCAGATT GTAAACTTAG CAGACATTTT TAACCACGAG CATTCTTATC	240
	CAAATAGnCC TTGTCTGTTA TTTCAAGTC AATTTTCACA ATAGGATCAC TGCATCTTTT	300

55

ACCCTCTTTT TCTGCTnCTC ACATAACTTT CAGATGGACT

400

(2) INFORMATION FOR SEQ ID NO: 881:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 333 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 881:

AAGATATTGC GAAAAGAAGT GACAGTAACA GAGGAATTC AAAATTTATT CAACCATATA 60
 TTGAAAATTG ATGAAATGGT GCATGCAAT GAAGCGCGTA TTGCGTATGA AGCAGACATG 120
 CGAAAACCTT TATATAGTAA ACGCATTAT CAAAATTAA CATTAGACTC TATTGTTTTT 180
 AGAAATACAT TGAGATATAC AGCGATTATG ATGATAGCGG ATATTTATTG CGTTAATGTT 240
 TGATTTTGAA AAAGCATCCT GGATCCCGTT ATCTGCACAT CCAATATTCC TAGGGCCATC 300
 AnCCTATACC ATGCCATCCG AGAGAGGTAT Ggn 333

(2) INFORMATION FOR SEQ ID NO: 882:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 617 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 882:

ATTGAAAGAA AAAGTACGT ACTTATCCGA TGATAAAATG AAAGAAGTAG ATAATGCACT 60
 AATGATTAGT TTAGGGCTGA ATGCAGTAGC TCACCAGAAA AATTAGGCGT CTATTATATG 120
 TATTTTTCAG AGATAAATAA AATATTGATA TAAAAGACAA TAACTTTATA ATAATTATAA 180
 CTATTTCTAA ATTCTGTACG AAGAATTTTC TTATAAACAA AGATTTTAGC AAATACCAGT 240
 TATGATATTC ATATTTTTTA TTATAAAGG ATGTCTTAAG TTTTITAGGC TTTAGGTATT 300
 CCATCCTAAA GTTTTTTTAG CTTAAAAGTA TCATCTACAG CAAAATTGCA AACGACAAAA 360
 TTGATAAGTG CAATTAAATA AATGTTAGTA AGTGAATCAT AATTATCCTT GCTTAAGCAT 420
 TTGCTTTGTA AGGGAAGTGA GGAGGCAACT AATCGTGGAA GAATTTAAGC AACATTATAA 480
 GGGTTTAATT GATGAAAGTT TAACGTGCCA AGATAAAGTA GAATTGATAA AAAAGTGTGA 540
 GAAATACACT GACGAAGTGA TTCGTAAGGA CGTCTTGCCT GAAGACATTG TCGATATTCA 600

(2) INFORMATION FOR SEQ ID NO: 883:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 583 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 883:

```

5      GTTGTATTAA AATTTTTTCAA TTTAACAACG AAACAATACG AAGAAAAACA TATTACTGAG      60
15     CCACTGGAAT TGACGAGCTT ATTAGGTAnT ATTTCTCGTC TAGACAATGG TCATTTTGCA      120
      CATTGTCATG CTACTTTCGG TACTCAATCA TATGAACTT TTAGCGGACA TCTCGCTAAA      180
      GCAATTGTTT CTGCAACTGC TGAAATCATT CTTACTGTAA CTGATTTGGA CATTCAACGT      240
20     TCATTCAAAG ATGCAGTCGG TTTAAATTTA CTTGATCCTC AATAGCACTT TACTTTTTAG      300
      TTGAATCAAA TTTTATTACA AGTTATCATA AGTGCTTAAT CATAAATGCA TTCTCGTTTA      360
      TTAATATACT TCAACGAGTT AAATTAAATT TTTAATTAGG AATTGAATGC GTTTATAACT      420
25     ATCACATTTG aATGaATAAC TTTTTCATTA GAAAGTAGTG TkTATTATTG aTGCAATCTC      480
      GaTACATCGC TAGAATTTAC TTTtaATTTT ATTTATCGTC TCCCTTnTTG AGACTAAAAT      540
30     TTTTCAATTT ATGACTTTAA ATTTGTTTTT AGCATATATA CCT      583

```

(2) INFORMATION FOR SEQ ID NO: 884:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 524 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 884:

```

40     GCAGAGGGCT TACGATAAAA AGAAAAATCT CGCTCGCCCG CTTCAGTCAA ACTCACAAAA      60
45     GcTAACGCat GwyTGCTyCA TTCGTGCGAT ACACTTTTGA TACATCTACA CCAATACTTG      120
      ATATCGTTTC AATAATGCTA TCTCCAAATG CATCATTACC TAATTGTGTA ATCATAtACG      180
      CTTGTTGTCC tAACTTTTGA ACTGTACAAG CTACATTGCA TGGCGCGCCA CCAATTTGCT      240
50     TCGTAAATGT TTGAACATCT TTTAAATTCG CATTGTGAAC ATTTGGAATA AAATCAATTA      300
      ACGCTTCTCC TATTGAAAAT AGACGTCTCA TTTATGTTCA TCCTTTAAAT CATATTTAGT      360
      AAATTGTAAA TATACTTGCC CTGATTCTGT TGATGTTTTA ATACCTAGTG CGTCTTCTGT      420

```

TGTATCAACA AAAATTTGTA ATTGCTTTAA TGGCGTGTCT AATA

524

(2) INFORMATION FOR SEQ ID NO: 885:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 885:

5	TTAATGATTT CTTGCTATGA TTCACCAACA ATTTGCGCTA AAATATCATG CGCAAGTACT	60
10	TCACCTTCAA CCATAAATTC TATTTGCTCT ACTAAAAATT TTACGTCATT CATGCTATTC	120
15	ATTTTGGAA TTAACAAAGC ATATAAGTTT GTAAATTCTT TTAATACGC AGCATCAGCT	180
20	TTTAAGTAAT GCGGTAATGC GTCACCTCCTA TATCTCCGGA TAACATCTTC TGAATAAAGT	240
25	CATCCTCATA AATATCATAA TGATGGCTTG CAGCTGGGTA CAATTTTGTG AAATTCCATG	300
30	TAAAAATCCT CCCTAAATAA AAAACTACTT CCAACATGAA GAGTTGAGGC ATGTGCAAAC	360
35	TAGCCCATCA CTCATAACAC TTCCACGTGG GACTACCAAC	400

(2) INFORMATION FOR SEQ ID NO: 886:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 857 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 886:

35	AAGAATTTAA ACAAATGAT ATTTGGAAAC ATTTTAAAGC TGTGAAAAAT AATCATGTTT	60
40	ATGACTTAGA GGAAGTGCCA TTCGGTATTA CAGCAAATGT TGATGCTGAT AAGGCAATGA	120
45	CTCAATTATA TGATTTATTT TATAAGGATA AAAAATAGTG AGTTGATATG ATGATAAAAA	180
50	ATAAAAAGAA ACTACTATTT TTATGTTTGT TAGTCATTTT AATCGCAACT GCTTATATTT	240
55	CGTTTGTAAC CGGTACAATT AAATTGTCAT TTAATGACCT ATTTACAAAA TTACAACTG	300
60	GTAGCAATGA AGCAGTGGAT TCAATCATTG ATTTGCGATT GCCACGTATA TTAATTGCAT	360
65	TGATGGTTGG CGCAATGTTA GCAGTTTCTG GAGCATTATT ACAAGCAGCA CTACAAAATC	420
70	CTTTGGCAGG GCGAATATCA TTGGCGTTTC CTCAGGTGCA CTTATAATGA GAGCCTTTGT	480
75	ATGTTGTTTA TTCCACAATT GACTTTTAC TTACCATTAT TAAGTTTTAT TGGAGGTTTA	540

ATATTAGTAG GTGTTGCGTT ATTCGTATTA TTAAATGGTG TTTTAGAAAT TTAACTCAA 660
 AACCCTTTAA TGAAAATTCC TCAAGGCTTA ACAATGAAAA TATGGAGCGA CGTATACATA 720
 5 TTAGCAGTAT CAGCATTATT GGGATTAATA TTAACATTAC TATTGTCCCC TAAATTGAAT 780
 TTACTAAATT TAGACGACAT ACAAGCGCGA AtATCGGTTT TAATATTGAT CGTTACAGAT 840
 10 GGTTAACAGG GTTATTA 857

(2) INFORMATION FOR SEQ ID NO: 887:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 675 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 887:

GATTTATTTT AATATTATTG TTAGAAGGAA TTTTACAAA TTCAGCGAGT GCAATCGAAT 60
 ATTCAGACTT ACATCATAAA AGTAAGTTTG ATTCAAAGCG TCTAAGTAAT GCTAAGATGT 120
 25 CATTTCATCA TCCAACCTCAG CTTGAAAATA AAAACACAAA CGATAGACTG TTGAAGCATG 180
 ATTTGTTATT TCATGACATG TTCGTAAATG ATGATTGGAA AAAGGATTTT AAAGTTGAAT 240
 TTGAAAATGA GGCACTTTCA AAGAAATTTA TAAATAAGGA TATCGATATA TTTGCTGGAA 300
 30 ATTATGGATA CGGATGTCAT GGGGGAGCAA CCAATAAAAC GCAATGTAGT TATGGTGGTG 360
 TTACTTTAAG TGACAATAAT AAATACGATG ATTATAAGAA TATACCTTGT AATTATGGA 420
 35 TTGACGGACA TCAAACAGAA ATAGAATAA CTGCAGTAAA AACGAAAAAG AAAATTGTGA 480
 CTATTCAAGA ATTAGAGGTT CAATTAAGAA ATTATTTGAA TGAGAAGTAT AAGTTGTACG 540
 AACAGGTGG CGACATTGTT AAAGGGTATG TTAAATATTA TAATGATGAT GAACAAAATG 600
 40 TAGAATATGA TTTTATAAT TTAAATGGTG AGTATGGTCG TGAGGTATTA AAAATGTATG 660
 CnGATAATnA AACnA 675

(2) INFORMATION FOR SEQ ID NO: 888:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 851 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 888:

AATTCCTAAT TAACAATGCC TTCATTTAAA AACCTTCTTC CATCAATTG ATGTTTTTCAT 120
 GATATTAGG TTTTCTCTTT TCAAGATAAA CCATTAAGTy CTCAATAGAA GGTGTAGTGA 180
 5 TATTCACCTT AKGACCTAAA ATTCTTTAA ATACTTGCGC ATGTTCTGTT AATCCTATAA 240
 ATCCCGTACG CTTATGTTCT TCATAAATAA GTAGAGATGC TAATTCATCA TCAAGGTCCT 300
 10 CAATAGCACC ACTCACAAC TGAATATCTTT GTAACAGTTG TTCTTTTGAA CCATTTAAGA 360
 TAACCTCACC GTCACCTAAG TGAATGATAT AATCAGCTAT TTTTCTAAA TCTGAGATAA 420
 TGTGTGTCGA CATGAATATT GTTTTATTTT CATCAATTAA TTCTTGCTGA ATTATCTCCA 480
 15 ATAGCTCATT TCTAGCTAAG GGATCGAGAC CTGAAGTAGG CTCATCAAAA ATATACAATT 540
 CAGCATGATG TGAAAATGCA ACTGCTAGTG ATAATTCAT TTTCATCCCA GTCGAAAATG 600
 TTTTATATGA TTTATTGATT GGTAAATCGA ACTTTTCAAG ATAAAATTCA AATACTTGAT 660
 20 GGTCCCATTT ACGATAAAAA GGGGCAATCA TTTTTCaAG TTGCTTCGTA GTCCATCTCT 720

CATTAAAAATA ATTTTCAGAG TAAACnAACC CAATTCTATT CTTTAACTCT ATCGGATTGA 780
 GAGCCATATC CTCTTCTAAT ACTCTAATAA CACCAGTTTG TGGGTGATAC AAATCCATAA 840
 25 TTAACCTAAT n 851

(2) INFORMATION FOR SEQ ID NO: 889:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 362 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 889:

AATCACCTTC ACGCCAATAT TGATTTTCAT GCGTAAATAC TTGTGCCGTT TCATGATACT 60
 40 TTGTCAATCG TGCGTGTTC TGGGGGGAAT ATTTTTCAGT AGCCCAATTG GCTGCATGAC 120
 CTTCAATGGC TAGTTCAATT GCAGGATTAA TTAAATCTTC CAATGACAAT TTAGCATAAC 180
 GCTTGTGAAT ATAATCAAAC AGCTTTGGAA TTGCTGGCAC ACGACAGTTT TACCATGTGT 240
 45 AGTCATATCA AAAAATGATT TATATTCGCC TGAATCAACT AGATAAAATT GGTTGGCTAC 300
 ATGGTCAGGG TGCTGGCTCA CGGTGCATCA AACGChGnTA ATACTGCCCA GTACCTTTGC 360
 50 TC 362

(2) INFORMATION FOR SEQ ID NO: 890:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 747 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 890:

	TTGGTTTATT CCCAAAAGT ACGCGAAAAT TAGTAGAGAA GAATTTGAAA GTTTAAATAT	60
10	TGTCAAACCC GCTAAAAATA ATACTTTCTG GCCTGTTGCA GGATTTGCAG TGTATTAAAC	120
	AACCTTAACA AGAAAATATA TCTATTTGCT TAACATCCAT TTAGAAAAAG AAATAGTTAT	180
	ATTAACATGC TGTATGATAC TTCTAGGTGT TTTGCGATTG TTTATATATA TAAATACAAA	240
15	ATTGAAGTTA CATATTTTGT ATAAAAATAA AAGTAATAAC GAAAAGATCA TATTAATACC	300
	TACATTTAAA AATATTTGTT TATCCTTATT TGCTTATATA TTATTTGGTG GATTGTCAAC	360
	AATGGCTCTG AGTATGTTAG TAACTTCATC CCCTCAAAAT ATAATAGAAT TTCTTGCTTT	420
20	AATTGGCATG ACTGCATGCT TCTTTCTACT GAATATGTCA TCGGTTCTAG ATAAAAAAT	480
	TCATGTTATT TTAAAAACAA ATAAGTAGTA AAATTGATTA ACTTAGGTAG TATCGGATAC	540
	TTAAATGTTG GTTCATAAAA AGCAATGATT TTAAATCGAG GAGCTATCTT AGAAcAGGGA	600
25	AATAAACAG CCAAAGTTAT AAAAAGTGAA TTAATAACTA ATTATATTAT GTTAGCCACG	660
	CTTCAAATAA AAnATAATTA GAATAAGGTG GGATTGATAA TCAAnGCTAn GCGAATCTAA	720
30	AATCATCAAT AAAAACCCCA AATATAG	747

(2) INFORMATION FOR SEQ ID NO: 891:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 526 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

35

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 891:

	ATTTTGAAAT TTTAGCAGAT ACTGATAATG GTCTCGATGC AATGAACTT ATTGAAGAAT	60
45	ATAATCCTAA CGTTGTTATT TTAGATATAG AAATGCCAGG CATGACTGGA CTTGAAGTTT	120
	TAGCGGAAAT TAGAAAAAG CATTTGAATA TTAAAGTGAT TATTGTAACA ACTTTTAAAA	180
	GACCGGGATA CTTTGAAAAA GCAGTTGTGA ATGAtGTGGA TGCATATGTT TTAAAGAAC	240
50	GTTCTATAGA AGAATTGGTG GAAACCATTa ATAAAGTAAA TAACGGAGAG AAAGAATATA	300
	GCGCCACATT GATGACTTCA TTTTGTAG ATAAAAACCC ATTAACGCC AAAGAACAAA	360
	TTGTATTAAG GGAAATTGGC AaTGGTTTAA GTAGTAAAGA AATAAGTGAA AAATTATTTT	420

55

ATCGTTTTGA TGCTTGGGAA AAGGCAAATG AAAAAGGCTG GACCTA

526

(2) INFORMATION FOR SEQ ID NO: 892:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 751 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 892:

15	TATTTGATGT AAAAGCGAAn GAACCATACA ATGTAACAAT TACTAGTGAT AAATACATCC	60
	CTAATACTGA TTTGAAACGT GGGCAAGCTG ATTTATTTGT AGCGGAAGGT TCTATCAAAG	120
	ATTTAGTGAA ACATAAGAAG CATGGTAAGG CAATTATAGG AACGAAAAAA CATCATGTTA	180
20	ATATTAAGTT ACGTAAAGAT ATTAATAAAA TCTATTTTAT GACAGATGTT GATTTAGGTG	240
	GACCAACGTT TGTCTTAAAT GACAAAGACT ATCAAGAAAT AAGAAAGTAT ACAAAGGCAA	300
	AGCATATCGT CTCTCAATTT GGATTCGATT TGAAACATAA AAAAGATGCT TTAGCATTAG	360
25	AAAAAGCGAA AAATAAAGTT GATAAATCTA TTGAAACAAG AAGTGAAGCG ATAAGCTCAA	420
	TATCAAGTTT AACCGGAATA TTATTATTTG TAACATCATT TTTAGGTATT ACATTCTTGA	480
	TTGCTGTATG TTGCATTATA TACATAAAGC AAATAGATGA AACCGAAGAT GAGTTAGAGA	540
30	ATTATAGTAT TTTGAGAAAG CTTGGATTTA CACAAAAAGA TATGGCAAGG GGAATAAAGT	600
	TTAAAATTAT GTTTAATTTT GGGTTACCTT TAGTTATTGC ACTATCACAT GCATATTTTA	660
35	CATCATTAGC ATATATGAAA TTAATGGGTA CAACGAATCA AATACCGGTT TTCATAGTAA	720
	TGGGATTATA CATTTGTATG TATGCTGTTT T	751

(2) INFORMATION FOR SEQ ID NO: 893:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 893:

50	GGATGTTGTA CATTATTCAG ATTACTTTGA AGGGGCACAA AAATATTTGA GCTATTTAAA	60
	ATCAACAGTA GATGTTAACT TTGAAGGTTT GAAAATTGCT TTAGATGGTG CAAATGGTTC	120
	AACATCATCA CTAGCGCCAT TCTTATTTGG TGAATTAGAA GCAGATACTG AAACAATTGG	180

TAGCTGAAAA AGTAGTTGAA ACTGAAATGA TTTTGGGGTT AGCATTGGA CGGCGATGGG 300
 AGACAGAnCC ATAGCAGTAA GATGGAGAnG GnCCAATCCG TTGACGGTGG ACCCAAT 357

(2) INFORMATION FOR SEQ ID NO: 894:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 464 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 894:

GCTAACCTGC AAAATTCGAT AAGCGATTCA ATaCTGAcGC CTGcATTTCG CAAATTTTTC 60
 ACTAAATAAA TCCAATTTAA ATCACTATCA TTATATATTC TATATCCATT TTCATCTCGA 120
 TTAAGTGGTG GAATCACACC AACCTTTTCA TAATATCTTA AAGTGTCTTG AGATATATTC 180
 ATGAGCGCTA CGACTTCTTT AGTTTTTCATT GCGACTATCC TTTCAGTTAT GTTTGGTTCG 240
 CTAAAGTAAT GTTGCTTTAT ATATTGTCAT CTTGCTTTGA ATACTTCTTA TTTTATTACT 300
 CAAATTTAAA TTTGTCTCTT TTTTAACATT TTACATTCA TCGTTTTTAA TTAATTTAAA 360
 AATTGTATAA CTkAAATATT TAAATGATA TAAWCACTAA GATTGaTAAT AtTTAATTnT 420
 TTGGAAAATT ATnTTAAGTT GCCAATTTTG GGGGGATGCG GAAA 464

(2) INFORMATION FOR SEQ ID NO: 895:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 599 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 895:

AnAATGAAAG AGTTACAGGA CTTTATTGCT CGTTTCTCAG TAACGCTTCT AAATCTAAAC 60
 AAGCAACAAG TCGTAAAAAA CAACTCGAGA AAATTGAATT AGATGATATT CAACCATCAT 120
 CAAGAAGATA TCCTTTCGTT AAATTCACAC CTGAGCGCGA AATCGGTAAT GACTTACTAA 180
 TCGTTCAAaA TCTATCTAAA aCGATTGACG GTGAAAAAGT ATTAGATAAT ATTTCAATTCA 240
 CAATGAATCC AAATGATAAA GCAATTTTAA TTGGGGATAG TGAAATTGCG AAAACCACAT 300
 TGCTTAAAAT ATTAGCCGGT GAAATGGAAC CAGACGAAGG TTCATATAAA TGGGGTGTA 360
 CAACGTCATT AAGTTACTTC CCTAAAGATA ACTCAGAATT CTTTGAGGGC GTTAATATGA 420

GCGGCTTCTT AGGCCGTATG CTATTTAGTG GAGAAGAAAGT TAAGAAAAAA GCTAGTGTAC 540
 TTTCAGGTGG AGAAAAAGTA CGTTGTATGC TAAGTAAAT GATGTTATCA AGTGCAAAC 599

(2) INFORMATION FOR SEQ ID NO: 896:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1057 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 896:

TCATTAGTAG AAATCGTTAA AGATGCATCT TGCAATTTAA AATCCGAATC TTTGTATTGT 60
 TTGTTACACAC TATCTACGTT TAACAATGTT GTCATATCCA TGCTCCTCTT TGTTTAATTT 120
 TAATAAAAAC GTCTTCTCTT CAATAAATAA CTAAAGGCGT TATATATGAA AATAGCAATG 180
 ATAAGTAGCA AACTAAAGCT TTGATTAAAT CCAGTAGTAA TTGAATAAAG CCCAATTACT 240
 ACAATGGCTA GTATCAATAT TGATAAGTTG ATCGCATATG TTTTAAATAA TGCAATTAAT 300
 TCTATATGGC GTTCACCTTC ATCCAATATT TCCAATCGCT TTTCAGTGTA ATTCTTATCT 360
 GCAATTTTTG GTATTCTGTC ATCAAACCTT CTATTAAACA GTGTAAATTG TGTATTGAAA 420
 ATAGCACTAG CAAAAAATGG TATTAAAAAG AATAGTATTG CATTGCTGTC AGCGTGCCCT 480
 ACCACAAAAA TAAGCAATAC TAAAAAGCA ATAAGTGTCT GCAGAATACT TAATATACTT 540
 CCATTTAAAA CATAACGATT CGCAAGCAAC TCATATTGAT CTGTTGCATC GATATCTACC 600
 TCTTTATCTA CAAGTTGCTT ATACTTCAAT GCACGTCTTT GATTCATCAA AACAATGGCT 660
 TCTACCAATA TGATAATAAT CGTCGCAACA ATCGATATTA CAACGACATT GTTATATGTC 720
 GCAAACGTCA AGTTCTCAAT ACCAAATCCA TCAAAATTAC CTAAAATTCC ACCTATGATA 780
 CCCCCTACAA GTCCACCCAG TAAAAGATAT CCGATATATC TTAGTATTTT CATGCCTCAT 840
 CCTCCTCAAT AATAAAAACA GTTCCACCG TTTCATTGAA AATGCGAGCA ATTTTATTG 900
 CCGTTAATAC TGATGGCATA AAATTGTTTC GCTCAATTAG CGATATGGTT TGTCTTGAAA 960
 CGCCCGCTTG TTTAGCAAGT TGCCTTGGT TTAAGCCATC TCGTGCTCGT AATTCTTTCA 1020
 ATCGATTACG CACATCGCAT CAACTCCnTA ATTACAC 1057

(2) INFORMATION FOR SEQ ID NO: 897:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 336 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 897:

5 AAATTATTGA GTTAACAAAT CATTACGGAG CACATAATTA TTTACCATTG nCAATTGTCA 60
 TTTCAGAAGC CGAnGGGGTA TGGGTAAAG ATCCTGAAGG CAATAAATAT ATGGATATGT 120
 GAnCTGCATA TTCCGCTGTT AACCAAGGTC ATAGACATCC GAAAGGTATT CAAGCATTAA 180
 10 AAGATCAAGC TGATAAAGTG ACTTTACTCT CACGTGCTTT TCATAGTGAT AACTTAGGTG 240
 AATGGTACGA AAAAATTTGT AACTGGCAG GTAAAGATAA AGCTTTACCA ATGTAATACA 300
 GGTGCTGTAA GCAGTAGAAA CAGCTTTGAA AGCAGC 336

(2) INFORMATION FOR SEQ ID NO: 898:

(i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 302 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 898:

25 TGnTGnTTTC TTATTGTTGA CCAATTATTT TGCATACCAA ATCCAAATCA TGTATTTATC 60
 AATCACATCC TAATGCTAAA TCCAATGTAT TACATTGTTT AATGGTATAG CACAATCTAT 120
 30 CATATTTGGT ATATCAAGTA TGGAAAACAT TCCATATCAT TTTTACTTTA TTTTATTCTT 180
 ATGTTTAATA GCTGCAGTAA ATTCGTATT AGCAGGTATA CGACACACGG CAATTTATAA 240
 TAAAACATCT AAGTGACAC AACTGATAA TCAACAGGGA GTTTCAAAGA TAGTCAGACG 300
 35 GG 302

(2) INFORMATION FOR SEQ ID NO: 899:

(i) SEQUENCE CHARACTERISTICS:

40 (A) LENGTH: 469 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 899:

45 CCACTAGCTG ATACAGTAGG TATACCAAGA TTCGTCATCG TTACGACATA TCAATTTGGT 60
 50 CAATATGCGA TGTATTCTT AGCGCCGACT GGACTTGTTA TGGCCACACT ACAAATGTTA 120
 AACATGCGAT ATTCACATTG GTTCCGATTT GTATGGCCGG TAGTTGCTTT TGTATTGATT 180

TATAAAAAAT ACTAATGGGG TTTTATGCAT CTCGTAGGTT TGTAGAAATA CTAAACTAAG 300
 CGAGGTGCAT TATTATTTTT GATTAAGAAA ATAATGACGG TAATGATAAC ACTAGTAAGT 360
 5 AATTGATACA ATGCTCTATT TAATAATGAT ATTTTAAAAA TTTGTTTTTA ATGTAATGTT 420
 AGATCTATGG TATATTATAT TTAACGTGGT AAATATGTAT TTGCTGTAA 469

(2) INFORMATION FOR SEQ ID NO: 900:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 821 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 900:

CTTTATTGGT AACTCTCTAT aATATtTTaA CATTTTTACG CTATCGTGCA AACGCAaCa 60
 CTTTGAATTy TCTGATATTT TTAGCATATA ATTTACACCC TGCACGATGA ATTGTTAATC 120
 CAGTTGTATA AATATCGTCA ACGAGTAATA TTTCCTTACC ATTTAAATCT AATCCGTAT 180
 25 CAATAATAAA TGGATTTTCA TCTGCCAGAC GCTCTTTCTT AGTTAAATGA GACTGTTTTG 240
 GTCTATTTGA CATCTTTAAA ATCTTATCaA AGCGAATCCC TTTAGCTTTT AGTACTGCTT 300
 CTACCGGGTT AAATGTTCTA GATAAATCAT GTGCCGCGCA AGAAGGAATT GGCACAATAT 360
 30 AGTCATAAGA TGTTTGTGGT ATTTCAATCA AATGTGCCAA TAATTCACAT AAATAATAGT 420
 CTTTCAAAAA TTTATACTGA TGTATCATCT CTTTCATTAA ACCGTCATAT TGAAATTGAC 480
 AATATAATTG TTCCATTAAA TTAAAGTGTG CCGATAGAAA CTTGCAGTCT AAACAATACG 540
 35 CTTTCATCTG ATTTAAGTGT TTTAAGCACC TTGAACATCG CCTTGCTTTA ATATCAAGTT 600
 TAATATTGTC CCAATTCTCT TTGCATCTGT CACATAATCT ATTAGGTTTC TTGAACAAAT 660
 TATAAATGGT TATATTTTCA TATAACTTAG CACCACAACCT CAAACAATTA TTCATCAATC 720
 40 CAACCTCTTT TTAATGCTAA TTTGTTTCATC CTTTGAATCT CTTTTTTAGC TTGAATCATA 780
 TTCATACTTA CCCCTTnCAT GAAAAACAA TACTTTTTCC A 821

(2) INFORMATION FOR SEQ ID NO: 901:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 349 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

TGATGCTATT AAAAAGTTAA TTGTGCGGTC TGTTTTGATA ATTTTAATAA TAACTTCAGG 60
 TAACTAAAAA TCCTAATATT GAAAAACAA AGCCATTAA AACATAACCT AGTATATTCC 120
 5 ATGTATGATT GTAACCTATT TGCCAGTTnT GTACTGACTT GCATAATTCT GTCACGTnCG 180
 AACCATGTAC AAGCCTGCAA CTACTGCTGA ATGATTCCTG ATGCGTGAAC AATTCAGCAA 240
 TTAAATACGT AACAAATGGT GTTACAATTG AATAATTGAA ACATATTAAT GTTTCATATC 300
 10 CTCGACGnCA TCAATGTTAA TCCGGACCTT ACTAATGCAT ACCTATAAG 349

(2) INFORMATION FOR SEQ ID NO: 902:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 390 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 902:

CAAGTGGTAT AAATTTACCT GGTGAAATGT AGGTCGTGGT GGCGATGATA CATTATTCGC 60
 25 TAAAATCGAC GGC GTTGTTA AATTCGAACG TAAAGGTCGC GACAAAAAAC AAGTTTCTGT 120
 ATATGCAGTT AGCTGAATAA TTTTGTCTAG TTAACACCAG AAAGTGAATC TTCTGGTGTT 180
 TTTTACTTTT TATAAAATGT TTTTCATTAT TATTTTCATT ATGnTATTTA AAAATGGGGA 240
 30 TTTTAGACGT TATACTAAAT GTGCACTGTA TAGGGGCCCT AATCACTAAC TATAGGGGGA 300
 CAAGGATACA GTGCAGCGTT AAGGATAACT GnCCACATTG GTCTGGGAAT ATAGGATTTA 360
 AGCAAGGTTA TAAAGTACTC nTAGGCCCTA 390

(2) INFORMATION FOR SEQ ID NO: 903:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 903:

GGAATAGACG TATATGCGCG TTGAATTTAA TCCTAATAAG CTTTCGCATG ATGAAGTGCT 60
 TTGGTTAAAA CAAAATATCA TCAGTTATTT GGACGATGTT AGTTTTACGA GATTAGATTT 120
 50 GGCTTTTGAT TTTGAATTTG ATTTAAATG ACTATTATGC ATTGTCAGAT AAGnCGGTAA 180
 AAGAACTAT ATTTTATGGC CGAATGTAAA ACCAGAACAA AATATTTTGG TGnCGAATA 240

GATTCACATT CTATGCGGTG GAATTGATTA AACG

334

(2) INFORMATION FOR SEQ ID NO: 904:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 904:

CAAGTTGGGG AACTGTTTC AAATGAAACA ACAGTGTGTA TTTTAGAGGC AATGAAACTA 60
 TTTAATGAAA TTCAAGCAGA AATTCAGGT GAAATTGTTG AAATCTTAGT AGAAGACGGA 120
 CAAATGGTAG AGTATGGCCA ACCGTTATT T AAGGTGAAAT AATGAAAAAG GTTTAATTGC 180
 AAACCGCGGT GAnTCGCAGT TAGGATTATT CGCGCTTGTC GTGATTTAGG CATCCAACT 240
 GTTGCATCTT TCTGAGGGGA TAAAGATCGC TACATCTCAA ATGCTGATGA GGCATATnCG 300
 TGGGCCnCTT GTCTAAGGTC ATATTTAATA TCCG 334

(2) INFORMATION FOR SEQ ID NO: 905:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 905:

TTCACCCTGT AATTCTTaAC CGTCAATTGA CCTTTATGCA GATTAAATAT TCCTAAAACG 60
 TATAACTCTT CTAATGATAA TTGACACATA TTTAAATAAC ACTTTAGATT CCGCAATAAT 120
 TCTTGTGACG ACAATAAATA CGATACATAG TCACAATAA AATCAAATGT ATATTGACCA 180
 AAATAACGTT CAATATAGTC ACTAAGCTCA TTATTCATAT ATTCTATTTn ATCTATATGC 240
 ATTTTATTAA TCGAAATAGT CAATTACGT TGATCCCTTT GATCTCTTCC TTTCAATAGC 300
 CATTGATGAT TGnTAAATA ACTTAACATT TGAAGAAGGG CCATCTTAGA TTGGATTCT 360
 TTCATTnTTA ATAACTATC TATTGAAGCG CTATTGGAA 399

(2) INFORMATION FOR SEQ ID NO: 906:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1478 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

EP 0 786 519 A2

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 906:

5	TACATTTTTC AATTTATGGC AAAATnCACa ATTTTCATCG AAATATTTTG TAnAnAATCA	60
	TTGCTAGGTG ATGAGTTATC TCGGTTAATT ACAAACGAT ATCTAAGTTT AAATATTAGA	120
	TCATAAAAAA ACTATCTACT GAATATCCCT CCATAGCATC ATTTTCTAA GCAAAAGTTA	180
10	AACTTAGTTA GATAAAATGC AAATGAGATT ATTGTAGATA GTCTCTTTT AATGTTTAAA	240
	AATGATTAAT GCCaTAAACA TAAATAATTC CaAAGAATGC CGCGCCACTA AGCACTGTTA	300
	ATATAAGACT TAGTAACAAT GTGCGTTTAT AATGTTTaaC AAATGctATG AACAAAATGA	360
15	CTACATTATA CGCAAAGAAA AGTCCGAATA ATGTCATTGT TATTTTCAAA TCAGAATAGA	420
	AAATATTTTAA TAGTAATACA ATGACTGCAT AAATTAAATA CGGAATAACT ATAAATTTGC	480
	GTTCAAATCT TAATTGTTTCG AAaCGtTTAT CTTCGTTTGT CATGATATGC TCCTTTATGA	540
20	TTTAAAAGTA AATAAGTTTA CGGAaATCT TGTCGGaTAA TAGCGGTGTA AAtGTCAAAC	600
	CACGACTGAT CATctAAAT AAGTkGTAGC CctTCGATTG CTTGATCAAT ACGCTTTAAC	660
	TGACTTGTTT CAAGTATCCG GCATGATACG ATGCGGTATT TTTACTAACC ACGCTATCAT	720
25	CACAGCTGTG TCACTyACAC mATATTTGTC AGCTATTGAT TGAACAACtT TCATAATACG	780
	TTGCGCTTTA ATATCTTCCT TGTCGAAAAT TTTACCGCCT GCAAAAGGAC TCCAAGCCAT	840
30	GATTTGAACA TGGTTTTGAT ACATTGAATC CATTGTTCCA TCTTGTAAC TATCAACGTG	900
	ATATGGCGAT AATTCTAATT GATTGATGCT AATATGTAGT CTTTCTTTCA TAATATATTG	960
	ATTTAACAAT TGGTATTGTG AATGATTAAA ATTCGACACC CCGAATGACT TCAACTTACC	1020
35	TTGTTTAAACA AGTTTAGTTA ATGCATCAGC AACTTGTtCT GgATCCATCA ATGGTGaAgG	1080
	ACGATGAATG AGTAGACTAT CTAAATAATC TACATTCAAA TTGATTAATG ACTGTTCAAC	1140
	AGATTTACAG ATGTGCTTAC TACTCAAATC ATAACGATGT CCATTTGTAA AATCAAATTG	1200
40	CTTAGAAGGC AAAATGATAC CACATTTCGT AACAATTtGA ATTTTATTTC TTAATTCTGGG	1260
	TGATAAATCC AAAGCATTAC CAAACAGTGA TTCACATTGA TAATCTCCAT AAATATCAGC	1320
	ATGATCCATC GTTGTAATTC CACGTTCAAC TAATTCATTT ATAAAATAAT TTAACtCTTT	1380
45	CGCAGTCATC TTCCATTcAT TTGCACGCCA AAAACCTTGT ACAAGCCTAG AAAAATGAAC	1440
	ATAGTGATTA ATCATTATTT GTTCCATATn TCATCCAC	1478

(2) INFORMATION FOR SEQ ID NO: 907:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 543 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 907:

	TTCTATGAGA ATAGATATTG TTAAATTAAG AAAGTAGTCA ATTTTATTAT GACAAAAGAA	60
10	AGAAGAACAT TTAGTTCAGA GTTTAAGTTA CAAATGGTTA GATTATATAA AAATGGTAAG	120
	CTTAAGAATG AaATTATACG AAAGTATGAT TTAAAACCCT CAATTATCTC AAATTCGATA	180
	AAACAACACC AAAATACTGG ACCCTTCAAT CATCAAGATA ATTTAAAAAG TGATGAAAAA	240
15	GAGTTAATAA AATTACGCAA AGAAGTTCAA CATTTAAAAA TGGAACATGA TGTTTTAAAG	300
	CAAATTTTAA AGTTGATTTA GAACTGAAC TTTTAAAGA TACATTACTT GAAGATTCTA	360
	ATTTATCTGA TTATATAAAG AACCAACTTC CAACGATATG GAGAGACTAA GAAATAGTTT	420
20	AAATTTATTT AATTTCAATA AAAACTCATA ATAATATTTA AGTAAGTTAG ATTGCTTTTA	480
	GCATTAGGAA TTCGCTTATA ATTAGATGTT CAATATAGAC TTTTTTACAC ATACATGAAC	540
	TAT	543

25

(2) INFORMATION FOR SEQ ID NO: 908:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 751 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

30

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 908:

	TTTnCGGTnG AACATGATTn CGATATTACT TCTAAAACGA TTCAACCAA ACCAGGAGAA	60
	AGTGTGGAC GTTTAGTTAA TGTCGATTGT AAAGATACAG TACTGGAGTA TTCAGAATTA	120
40	GATCCAGAAG TTGCAAATCA ATTTAACAAT GCTAATATCG GTATTCATGC ATTTAACTT	180
	GGTTTATTT TAAACGCTGT AAATCGTGAG TTACCTTATC ATTTAGCTAT TAAGAATTG	240
	AAGCAATTAG ATGAGAACTT TGGTGTTATT GAACAACCAA CTTTAAAATT CGAATTGTTT	300
45	TATTTTGACA TATTTACTTA TGGAAGTAGT TTTGTCACGT TACAAGTTCC TAGAGAAGAA	360
	GAATTTTCAC CTCTTAAAAA TAAAGAAGGT AAAGATAGTG TTGCAACTGC AACAGAAGAT	420
	TTACGTAGAA TGGGTTTAAT TTAATGATAG GCGGTGACTA TGATGTCCAA ATCAACTAAA	480
50	AAAAGTAATG ACACAATCGT AGAAACATTT AAGGATATCA TCCCTTTATC ATTTGGAGAA	540
	GAAATTGGTA ATGCGGCATC TCATGGTGTT GCAGCTTGT TAACATTATT AGTGTTACCC	600

55

TATGTTATTT CTATCTTTAT GATGTTTATT TCATCTACTA TTTATCATTG TATGCAAAAT 720
 GAAACACCTC ATAAATATAT TTTAAGGATT A 751

(2) INFORMATION FOR SEQ ID NO: 909:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 394 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 909:

AAATTGTCAC AATTCAGTCT AATTTAAAAG GAAGTTAATT ACAAAATTAA AAAATCATGC 60
 ATCGTGTCAT TTAGATATTG AAAAAGATGA GTCAAATTG TTTTCATATAT TTTCCAATAA 120
 CAAATTATTA TATCTAAATA TACAATCAGA AATATATGAA TAGAAATATC AATAAGAAAA 180
 ATAATATGAT TAAAAATGAT GAATGGCATA CTTATAAAGT GTCTAAATAT TGGCGGTCAA 240
 TATTACTTAC AAACACGAAT GTTAAGTAAT GTAGACAATG cTGaAAAAAC AATaAGTAGa 300
 AACTCTATAT AGAATGTTTCG TTTTATTTT TaATAATTGa ATAATCaTTA TTGGGTGGAT 360
 TTTAATATGG nATTCCGGTC GGCACACGGA TTAC 394

(2) INFORMATION FOR SEQ ID NO: 910:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 1022 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 910:

TAAAGCTAAG AAAAAAGAAA AACGTAAAGC TTATAACCAA CGAATGAAAG AACGTAGGAA 60
 AAATCAACCT AGCGCAGTTA GTCAACGTCG AATGAATTTT GAAGAGCGAC GTCAAATTTA 120
 CAACAATGAT ATTTCTGAAG AACGCAATTC AAGTGAAGTT AAGGACAAAA AAGAGCAAGA 180
 ATAAATATTG ATGATACCCA GATTAGTAAG CAGAGGTCTT TTGCTTATTA ATCTGGGTTT 240
 TTATATGAGG TTAATTATCG ATAACGTTTA ATTAAAGTGT TTAGGTGTCA TAATTTTAAA 300
 TGACGATTTT CCCATTACKA TACACCTAAA TtATCATCAA TCTGaATTCA GATGTTTATk 360
 ATAAAAATTA GATGAAAAAT ATGTTAATAT ACAAGKaATT TAATGTGcGk ATATCTATAG 420
 GCTCGTAGTA TACTTATTAA AATATTAAAC AAAGAAAGGA TTTTAAGATG AATAGAAAAC 480

GGCTATCCTA TTTTCTTTA AAAAGTGGTA ATGCATCACA ACGTGAAGAA TTAGCGAAGC 600
 AATTATCTCA GAACGGTGGC AAGGTTTCTT TAGATATGCT TCAGACAACA ATGGGTGCAT 660
 5 TAGCAATTAT TTTATTAATT TCAACACTTT ATGGTATATT TCGGACAATT TGTATTAAAG 720
 GACGTAGAAA ATTATCGATT ATACTTTTTG TTATCGCGAT AATTGTAAGT TTGATGGCTC 780
 TTAATTTAAT TGCAATTGTC TTATGGGTTA TCGTGATGAT TATGTTGATT TCTAAAAAAG 840
 10 AATCAAAAGA AACACACAT AAGGACGATG AGTATATTTA TCATTAAATAT GTTCATAGCA 900
 AAAGAAAAAC CATTAAATG TTAAGTTGTT AATTATTAGA TACAACCAAC ATTTTAATGG 960
 15 TTTTATTTTT AACTTTGTAG TTCTTGAAT GTTTGAACGA TTAAATAGAC ATTTAAAATA 1020
 CT 1022

(2) INFORMATION FOR SEQ ID NO: 911:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 911:

GGTACTTTAT TTTTATTTTT GGTCTTAGTG ATTTTACAT TATTACATA TAAAGCGCCT 60
 30 AATGGTATGC GTGCCATGGG TAGCATTAGC TAATGCAGCA ATCGCAACAT TTTTAGTGGA 120
 AGCATTTAAT AAATATGTnG GTGGCGAGTA TTCGGTATTA AATTTTAGA AGAGCTAGGA 180
 35 GACGCTGCGG AGGTCTAGGT GGTGTCGCTG CCGCTGGATT AACAGCATT GCTATCGGTG 240
 TGTCAACCACT ATATGCATTA GTTATAGCAG CCGC 274

(2) INFORMATION FOR SEQ ID NO: 912:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 679 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 912:

CTTTAATTGT TCACTTTATC ATTATTATCA ATCAACTCTA TGATATGAAA TTGTGTTAGA 60
 50 GATAAATCTA GTTCCTCATT TTCCTTTTAA TACTGTCTTC TTTTATCGGC ATTTTCTCTT 120
 TCTATAATAA ATTGTTGTAA TTTTAAAATA ACTTCTCTCT TCATATCCAC TATTATTCCT 180

TTGTTGTAAT TAACATATAT TTAAGTAGTT ATGCACCATT TATTCGCGCAT TTCACAAATC 300
 CACCTATAAT ACAAACTATC ATTTTAAATA AGCAGAATTT ACCCTGTCTT CCACACAAAT 360
 5 TGTTCGAC ACTTTAATGT GCCTACTATC CAAAAAGTT ACTCATAACA AATTGCGCAT 420
 TTTAATAAAT GTAGCAATGC CATTTGCATG CTGCAAAAAT ACTCGTATTC ATATTTATGT 480
 10 TTTATATTAT TAAAGTTTTT TAAATCCATA TTTTATAAC ACTTGCTATG TGATAAAATT 540
 AATTTATAT ATAAATCTT AAGATTCAGA TTATTTAATA GCAAAGGAGA TAGTGATATG 600
 GATGTTTTAA CAATAGAACA TTTAACAAAG AAGATAGGCA ACAAACGAT TCTCGAAGAT 660
 15 GTATCATTTA AGCTGAAAC 679

(2) INFORMATION FOR SEQ ID NO: 913:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 564 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 913:

GCCATCCTTC AGTGCTAATT TTTTCAAATT CTAATGCAGA TGCACCACTA ACCATAACCAT 60
 30 ATATAAAGAA AAAGACCACG AAAGTAATAA GTAGTAGTAT AGATGCACAT ATCATAATGA 120
 CATTTGAGTT TTCAGCGCCA AATTTAAATG TCAATGsGAA AATGATAGAG TATGCCCTTA 180
 TGATACCAAA ACTCATTAAA CCTGACATAA TACCAATCAT CACACTTTGG GTCACAATCG 240
 35 TAGTCACAAC TAATCCAATC ATTAACTTG CACCGAATAA GATTAAATAA AAGGCAAAGT 300
 ATGACTTAAT ATAATCACTA CGTTTAACCG GTAAAGTAGA TACATAATAC ATCCATCTTG 360
 AGTCTTTTTT aTGTTTAATA TTATCAGTAA TAGGTGTGAT TAACATAACC CCAGCCATkG 420
 40 CCGAACTCAT CAACGGATTA AATACTGCAA AGTATCCTGC AGCTATAATA GCGACTATAA 480
 AATAAATATA TGTTTGCTT CTCGTTGCAT AAAAATACT TAGGAACATA CCTTTCATTA 540
 45 TACTTCACCT CGCATTATGA TTTT 564

(2) INFORMATION FOR SEQ ID NO: 914:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 643 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

AAAGAAGAAG CAAGTGCAAA TAATTTAAGT GATATATCAC AAGAGGCACA AGAGGTTCAA 60
 GAAGCTAAAA AAGAAGCACA AGCAGAGAAA GACAGTGACA CATTAACTAA AGATGCAAGT 120
 5 GCAGCAAAGG TAGAAGTATC AAAACCAGAG TCACAAGCTG AAAGATTAGC AAACGCTGCA 180
 AACAGAAGC AAGCTAAATT AACACCAGGT TCAAAAGAGA GTCAATTAAC TGAAGCGTTA 240
 TTTGCAGAAA AACCAGTTGC TAAAAATGAC TTGAAAGAAA TTCCTCAATT AGTTACTAAA 300
 10 AAGAATGATG TATCAGAGAC AGAGACGGTT AATATAGATA ATAAAGACAC TGTTAAACAA 360
 AAAGAAGCTA AATTGAAAA TGGTGTATT ACACGTAAAG CTGATGAAAA AACAACTAAT 420
 15 AATACAGCTG TTGACAAGAA ATCAGGTAAA CAATCTAAAA AAACAACACC TTCAAATAAA 480
 CGAAATGCAT CAAAAGCATC TACAAATAAA ACTTCAGGTC AGAAAAAGCA ACATAATaAG 540
 AgATCATCAC mAGGTGcAAA GaAACAAAGT AGTTcmAGta AGTCaACTCA AAAGAATAAT 600
 20 CAAACTAGTA ATTAAGanTT CAAAAACAAC AAATGCTAAn TCC 643

(2) INFORMATION FOR SEQ ID NO: 915:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 915:

AGGTTTAAGG GAAAAATCCT ACCTGGAGAG ATTCAAAAAC TAAATGGACT ATTTCCAAAA 60
 35 ATAAAGGGCA ATCACATGGT GGTCTTATT GGAAGTTAAT AAATAACAAA GGAAAAGAA 120
 TAGCTTCTTT AACTAAAGAA GGAAAAATCT TAAGGGAATA AGGTGTTGTA AATTATGTGC 180
 TTTGATATAA ATAATTTGGA TATAAAAAAG TTGAATTTTA GAAAGGTAAA AAACGCAATT 240
 40 CATTTAAGTT TAAGTGGCGA TAAATACCAG TTTTGGAGG ACGGTAAAAC TATCAATAAT 300
 ACTTATTTTT TAGCTGTATA TGATAATGCA ATAAACATTT TTGAAGATTT GTTTtCGCCT 360
 tCTGATTCTA TAAATTTGGn TCATGTAGTA TATGTTTATA 400

(2) INFORMATION FOR SEQ ID NO: 916:

(i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

CCCAAAGTTC GATAGTGTAT TAGTATTATC TTAATAAAAT GTTAGGTACA ATAAAGATGA 60
 TTATATATCG GAGGTTAGTA TAAAAATGTA TGTAGATCGA AAACCATCAC TATATTTAGA 120
 5 GGATTGCGA CATGATTTTA AAAATAGTTT AAGTAAATTT GAAAATGGTG ATGAAGCATT 180
 TGATACGTTA TTAGGTTTCG TAGAGTTAGA TCATATTTAT TCGTCAGCAC TAAAGGAAAT 240
 10 AAGCACTAAA CTGAGTATTT TAGATGACAA TTTCAATCAC ATTTATAwAC ACAATCCTAT 300
 ACATCATATG GAGCGACGTG TGAAAGAAAT GCGTAGTTTA ATAGAAAAGC TTAATCGTAA 360
 AGGATTACAG ATTAGCGCAG AAAGTCCAA AGAACATATA 400

(2) INFORMATION FOR SEQ ID NO: 917:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 917:

GAAAATTACT ATGAAGATTG CATTAGGATG CGACCATATT GTTACAGATA CAAAATGCG 60
 TGTATCTGAA TTTTAAAAAT CAAAAGGACA TGATGTCATT GACGTAGGAA CATACGATTT 120
 30 CACAAGAACA CATTATCCAA TTTTGGTAA AAAAGTTGGC GAACAAGTTG TTAGCGGTAA 180
 TGCAGACTTA GGTGTTTGTA TTTGTGGAAC AGGTGTTGGT ATTAACAATG CTGTAAATAA 240
 AGTACCGGCG TTCGTTACGC ACTAGTACGT GATATGACAT CAGCGTTATA CGTAAAAGAG 300
 35 GAATTAAATG CGAACGTTAT TGGCTTCGGT GGACGTATTA TAGGTGAGTT ATTAATGTGC 360
 GATATTATCG ATGCCATTAT TAATGCTGGA TTATAAACCC 400

(2) INFORMATION FOR SEQ ID NO: 918:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1220 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 918:

GTCTCCAGCC ATTWACCAC ACATACCTGT CCATTTACCT TCTTTATGTG ACGCTTCAAT 60
 AACTTGTTTA ACTAAACGTA AGATTGAAGG GTTATATGGT TGGTATAGAT ATGATACAG 120
 CTCTGACATA CGGTCAGCAG CTAATGTGTA TTGAATTTAA TCATTTGTAC CGATACTGAA 180

5 GATTCCTAAT TCTATATCAT CCGAAATGTC ATGACCTTCA TTTTAAAGGT TTTCTTTTTC 300
 TTCTAATAAT ATAGCTTTAG CTTCTCTAAA TTCGTTAATT GTTGCAACCA TTGGGAACAT 360
 10 GATATTTAAC TTACCATAAA CTGATGCACG TAATAATGCA CGTAGCTGTG GTCTGAAAAT 420
 ATCTTGTTGC GCAAGGCATA AACGAATCGC ACGGTAACTT AAGAATGGAT TCATTTCTTC 480
 AGGCAAGTTT AAGTATGATA ATTCTTTATC TCCACCTATA TCTAAAGTAC GTACAACAAC 540
 ACGTTTACCG CCCATTGCTT CTAATACTTC TTTATAAGCT TCAAATTGTT CTTCTTCTGT 600
 AGGCATTGTTG TCACGACCCA TATATAAAAA CTCAGTTCTA TATAAGCCGA TACCTTGTGC 660
 15 ACCATTTTCa ATAACACCTG GCAAATCATT AGGTGTACCA ATATTTGCAG CAAGCTCTGC 720
 GTGAACACCA TCAACTGTAA CAGTATCAGC ATCACGTAGw TTTTGTAATT CTTTCTTGTC 780
 AGCAAAATAA CGCTCACGTT TATCTTGATA AGCGATTAACT TCATCTTCAG TTGGATTAACT 840
 20 GATTACATCA CCATTTAATC CATCTACGAT AATCATGTGC CCTTGTTTAA CTTCTTGAGT 900

AATTGATTTT GTACCAACAA TTGCTGGaAT TTCTAAAGAA CGACTCATAA TTGCAGAGTG 960
 aCTTGTTCTT CCGCCAATGT TTGTAGCAAA ACCTTGTAAG AATTCTTTAT TTAATTGAGC 1020
 25 AGTATCAGAT GCGGTTAAGT CATTCCCTAC AATAACAACG CTTTCATCAA TCATACTCGG 1080
 ATTCGGTAAT TCTACACCTA AAATATGTGA TAACACACGT TTAGAAACGT CGCGAATATC 1140
 30 AGCCGCACGT TCTTTTCATGT ATTCGTTATC CATAGATTCA AAAATTGTAA CAAATTGTGT 1200
 TGThACATCC GCTTAATGTG 1220

(2) INFORMATION FOR SEQ ID NO: 919:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 315 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 919:

45 TTAGATTGAC TGCAAATGCC GACTCAAAAG AACAAGCACA ATCATTGATT CAACCTGTTA 60
 AACAAGAAAT TCTTGATCGT ATTGGAGAAT ATTATTATGG TTCAGATGAC ACATTAATTG 120
 AGCAAGCTGT AATAAAGAAA ATTCATGAAC CTTTTGTAAT ATATGATGGT ATTACTAATG 180
 50 GTGCTTTATA TCATCGATTG AAAGAAGTGG ATTTAAACGA TGTCTAAAG GGTATGATTA 240
 ATCACAATGA AAACCTTTGTt GATATTAATa AACCTATTGA GCaGCAATTA AAAGATGCAG 300
 TGCAATTTGT TAATA 315

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 920:

ACTTTGTAAA CCTACAAATG TAATGAATAA TCCTATACCT GCTGAAACAG CCATCTTCAT 60
 TTGATAAGGA ATTGCATTAA TAATAACTTC CCTAAACCTT GTGACGGTTA ATATCGCAAA 120
 GAATATACCT GAGAATAAAA CGCCTGTAA ACCAACTTGC CAAGGAATAC CCATGGTTAA 180
 CACAACAGTA AATGCAAAGA ATGCATTTAA TCCCATACCT GGTGCTAACG CAATTGGATA 240
 TTTAGCTATT AGCCCCATGA ATAGCGAGCC TACAAATGCT GCTAATGCAG TCGCTACAAA 300
 AATGGCACCT TGGTCCATTT TCATATCTTC TGATACGCCT TTAACACCTG CTAAACTTAA 360
 AACTTGCGGG TTAAC TGCTA AAATATAGGC CATAGATAAG AAAGTTGTGA TACCGCCTAA 420
 GATTTCTCTT TTA 433

(2) INFORMATION FOR SEQ ID NO: 921:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 439 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 921:

CTATTTTATT TGTATAGCGC TTGATGTAA GTTATTTTAG CTGTCATACT ATGTGCTAAA 60
 CCAAATTCAG TTGTGTCATA TCTTCGCTTT TTTGTCACTG TTATAATAGG TATAATCGGA 120
 TATAATGAAA AGGKGAGGGA GGATTCAAAA TGCCTAGGTT ATTATATTCA TTTCTTTTTT 180
 ATATGATCAT AGGTTTATTT AGTGGCTTTT TCTATAGAGA GCTAACAAAA GCATATGATT 240
 TTA CTGGTAC AACACAATTA TCACTGTAC ACACACATAC ACTTATTTTA GGTATGTTTA 300
 TGKkTTTAAAT ATTATTACCA TTGGaGAmGT TATTTAAATT ATCAAGTTAC TACTTATTTA 360
 ACTGGtCTTC TATGTATATA ACATAGGTGT TATCGTTACT ATAGGTATGA TGGTGACAAA 420
 AGGATTCTTC CAAGTCACT 439

(2) INFORMATION FOR SEQ ID NO: 922:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 922:

5	GTAATATCTA TATACGTATA TTAAATGAT ATATCTGGGT ATTTTCTTTT TAATAGCGGC	60
10	TGTAGCCAGT CATAAATATC TtTCGaTGTT GCGCATTAA CGCAACTTGC ACATATAACA	120
	TCTGCCCCAT AACTACCAC ACTCACGTGC TCCATATATT TATCCCCCAT TGGTTTGATA	180
	GATTTTTATT AACTATCTA TTATAATATA sTmATAAAGA TTATCAAATT CATCTCTCGA	240
15	AAGGAGACTT GCCTGATGCC TACTGAAGAT ACAACGATGT TTGATCAAGT AGCAGAAGTT	300
	ATTGAACGTC TTCGTCCATT TTTATTACGT GATGGTGGCG ACTGmTCATT GATTGACGTG	360
	GAAGACGGTA TTGTAAATTA CAATTACATG GTGCATGGTG GnACATGCCC CAAGTTCTAC	420
20	AATCACTCTT AAAAGCTGGG TATTGAGCCG TGCATTACAC GAAGAAGTGC CTGG	474

(2) INFORMATION FOR SEQ ID NO: 923:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 554 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 923:

	TCAACTTGTG AAGAAAATTT ATTAACTTTA GTAACCTCTC CAACAAAACC TTGTGATGTC	60
35	ATCACAGCCA TATTGAAGT TATACCTGAT TTAGATCCCT TATCAATTAC AATTGTATTC	120
	ATCCACTGAT CCGGATTCTT TGCCAAAACC GTAGTAGAAA TAGGATCAAA TTTTGAAATA	180
	TCTTTTAAAT CAAGCTCTTT TTTTAATTTT TCATTTTCCG CTTCTAATTG TTGGTTCTTA	240
40	GATTCTAACT GGCTAATCTT ATTTTITAGAT TCTTTAGAAT CTCCTTTTTT AAAAAAGTCC	300
	CCAATCGTAC CAGCAACAAA ATTAACGGGA TAACTCACAA CTCGTTGTCC AAAAGACACA	360
45	GAATCACCTA TATATTGTTT AGGAGGTGAT TGAGATTGTG AACGTATGGA CAGCCCAATT	420
	AATGCAATAA AAACGATAAT TGCACATAAA ACAACAATTA ATTTGGTATT TTTAAAAAAC	480
	TTAAGCACCC AGAACACCTC TATTATGTCA nAATATTGTA TATCCTTTTC TAATTnATAT	540
50	TACTCCCATT ATGA	554

(2) INFORMATION FOR SEQ ID NO: 924:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 575 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 924:

	ATCTTTAGGC ATTAAGCAAG TTTATGTAGA AGACTTTGAA CATAAATCCT TTAGCAAAGC	60
10	TAAAAAAGCC TTAGAAGAAA AAGGGTTTAA AGTTGAAAGT AAGGAAGAGT ATAGTGACnA	120
	TATTGATGAG GGTGATGTGA TTTCTCAATC TCCTAAAGGA AAATCAGTAG ATGAGGGGTC	180
	AACGATTTCA TTTGTTGTTT CTAAAGGTAA AAAAAGTGAC TCATCAGATG TCAAAACGAC	240
15	AACTGAATCG GTAGATGTAC CATACTCTGG TAAAAATGAT AAGTCACAAA AAGTTAAAGT	300
	TTATATTAAA GATAAAGATA ATGACGGTTC AACTGAAAAA GGTAGTTTCG ATATTACTAG	360
	TGATCAACGT ATAGACATTC CTTTAAAGAAT TGAAAAAGGA AAAACAGCAA GTTATATTGT	420
20	TAAAGTTGAC GGTAAACTG TAGCTGAAAA AGAAGTCAGC TATGATGATG TATAAATATA	480
	ATTGAAGTAA ATGTACCGAG GTTCTATTT GGAAGTCTCG GTATTTTAT GTTGGAGATT	540
25	GCGGTAGTTT TAAATGCnT CnTGTCnTCA TATAC	575

(2) INFORMATION FOR SEQ ID NO: 925:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 307 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

30

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 925:

	AAAAACGCTG CTGAGTTTAA AAAGCAACAA TTAAATGAAC AAGGTATTTT CAAGAAACCA	60
	GTGATTACAC CTATTAAACC ATATAAAAT TTCTATCCAG CTGAAGACTA CCATCAAGAT	120
40	TATnACAAAA AGAACCCCGG TACATTATTA CCAATATCAC CGTGGGTCAG GTAGAAAAnc	180
	GTTTATAGAT CnCATTTGGG GGATCCAAAG CTTAAAAAGA TAAAAGTGAC TACCAGATAT	240
45	AGATATATTG TTACACAAGA AACGGCACTG GACCACCATT TATGAATGAT ATTGGACCAT	300
	TTGCTAA	307

(2) INFORMATION FOR SEQ ID NO: 926:

50

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 400 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 926:

5 CTCTACGCAC TCATTGAGAT ACACACATTG CGCATTGCTC ATAGAATCAG GTGTACACAT 60
 TAAAGAAATA CAAGAAcGAT TACGGCATAA AGATATCAAT ACCACTATGA ATATCTATGC 120
 TAAAATCACA AATTCATACA AAAAAGACGC CTCCCATAG TTTAGTCACC AAATGGAAGA 180
 10 CGTCTCGTAA TTAAAATATA TTTGCGTGCA TTCTAATTTA TACTTAGAAT GAATCATACT 240
 CGTGCATAAT GTAATTTTCT AGTTAGTCAA AACTATAAAC AGTTTTACAT CATTCTGGC 300
 ATGCCACCCA TGTTAGGTTG GTCATTATTT TTTTCTGGAA TTGATGCTAC AACCGCTTCA 360
 15 GTCGTTAAGG ACATTGCTGC AACACTTGCA GCAGTTGnAA 400

(2) INFORMATION FOR SEQ ID NO: 927:

(i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 809 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 927:

25 TTTAGGTGGT TTTAATnGTT ATGGTCATTC TGGACACCTA CTTATAATAA AATTTCAAAT 60
 30 CAAACTGAAC nTTTTGTACC GTTTGATTAA ACTCAAATTT ATTAGCTCCG TATTTAAATT 120
 TTGGTTGGGC TATATTCGTT TCGGTACTTA TTTCAACACC GTTTTTATAA ACTCGGAAGC 180
 TATCATAAAC AATTcTGTCT CCAGCTTTTA GTTTGATCCC TTCGATTTTC ATTATTTTCA 240
 35 CATGCGTTAA ATTCCATACA AACGATTCTG TATCTTCGCC TAAAATAATT GTTATCTTTT 300
 TATACATGTT GAATTGGTCG TTAGGAGCAC TACCATGATA GTAAACTGTA CCTTTGCTCA 360
 AATTTTCAAA TGTATACTTT CTTTTGTCTC CGCCTGCATG CCAATCAATA TTAAATCAA 420
 40 ACGACCACAA TCCAACCTTT TTGTTTTCTT CTAAGTCTAG GCTTGTTCCA ATACTTTCAC 480
 CGTATGGTAA TTCTGTAGTT TCGAATTTTA GTTCAAAGA AACTTTATTA CCTTTTGT 540
 TAGGGTTTAT AACTCCGTTA AAAATAACTT TATACTGTTT ACCATTTACA TAAATTTGTT 600
 45 GATCGTGTCT TGAATATTCG TAATCCGGGA AGTTGTTTTT ATCTAATTTT ACGTAATCAT 660
 CAGAAGTTGG TTGAGTAAAC CTGTAATTCA ACTCTTCTTT TCTTCTGATn TCTCGCAAAT 720
 50 ACATAGGTTT TATGTCTGTC GTTAACGAAT ACAACATATC TCGCATATAA GCAATGTCTG 780
 AACGATTTTT AACTTTACAA AAACAAGGA 809

(2) INFORMATION FOR SEQ ID NO: 928:

- (A) LENGTH: 1016 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 928:

10 nAAAACTATT ATCGCATCTA CaGTaATCGC TGCAGGTCTT TTAACtCAAA CTAAATGATGC 60
 TAAAGCTTTC TTTAGTTATG AATGGAAAGG TTTAGAAATC GCAAAAAAATT TAGCAGATCA 120
 AGCTAAAAAG GACGATGAAC GTATTGATAA GTTAATGAAA GAGTCTGATA AAAATCTAAC 180
 15 TCCTTACAAA GCTGAAACTG TTAATGATCT GTACCTTATT GTTAAAAAAT TAAGcCAAGG 240
 TGATGTGAAG AAAGCAGTTG TCAGAATTAA AGATGGTGGT CCTAGAGATT ACTATACTTT 300
 TGACTTAACT CGTCCTTTAG AAGAGAACAG AAAAAATATT AAAGTTGTTA AAAACGGTGA 360
 20 AATCGACTCG ATTACTTGGT ATTAaaaaAC ATACTGAATT AAATAGTTGT ACGCCAAACG 420
 TTAGAAAACA ATGCTAACGT ATTGGCGTGC TTTTTTATTT TAAGTAACTT CCAATTTATT 480
 TAGCATCTTT ACGACTGTTT AATAAAGCAC GTATGATTAA CACGGTTGCC ACTATATCCG 540
 25 TTACAATTTT TATGATTGTT AATACATTCG ATTTCTTTTT CACAATAGCC ACCTCGCTTG 600
 TTCAAAACAT AAACAACTAT TGCATTCACt TTTAAGTAAT TATTTATATT ATTTATCCCA 660
 30 ATAAGCTCAC CATTCAAATA AACACAATAT TATAAAATAA TTATACCTTT GGATATAGCA 720
 AAAAGCCACA CTCTATAGCA TGGCTTCTAT CAATTATTTT AAAGTATTAT ATTTTAAAC 780
 TAGATCGATT TGTCTTTGTA ATTTTTTCTT TTCATAACTG TGTGGGAAAT GAATTAAATT 840
 35 AACAGCTCTT TGTGCTTTAC GGTGTGTTGC AACAGTTCTT GTACGTTTGA AAAAGTTTAC 900
 AGCTTTTTGT GCATCCACAA CTTTTtATT TACTTGWTTT KTAAAGTTTG TTGATACTGA 960
 TCATATTTTT TAGCAGCTTC ACCGTTtTTA GTTGTGCATG AGATCACCGG CAACCG 1016

40

(2) INFORMATION FOR SEQ ID NO: 929:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 929:

50

AAATGAAATC ATACCTAAAA GAGATATTAT TACAGAATCA ATGATTGTG ACTGTATTCA 60
 AAATGCAGGT ATTGATTTAG AAGTATTTAA AGACGACTTA CAAAAAGTA AACTAACCGA 120

55

	CGTTTTCTTT AGTGAAGATG TTCATGAAGA AGGTTTAAAA GTCGAAGGAT TATACCCATA	240
	TCACATCTAT ACTTATATAA TTAATGAATT GATGGGTAAA CCTATCGAAA AGAATCTTCC	300
5	TCCTAAATTA GAACTTATA TACAGCAACA ACAACTTGTA ACGATGGAAG AATTACTTAC	360
	TATTTATGAA TGGCCAGAAA AACTTTTAAA CAAAGAGTTA	400

(2) INFORMATION FOR SEQ ID NO: 930:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 930:

20	TATTTCTGAC ATGTATCATG CTCCTTCGTG CTTTATTCTA ATGTAATATA CACAATTATA	60
	CATTGAAATT CAAATTTGTG AACACATTGT GAACTGACAT AAATTATACA CAATTTTATA	120
	GCGCATAATG TTTTAAAAAT ACACATTATA GCAATTATAA TTAAGTTCAT TGTGTTGTCA	180
25	TCAAAAAAAG AAAAAGGTGA TGTTTTAAAT GGATACAGTT GAATCAGTCG GTTTTTGACA	240
	GCATGACTTA GCAGTTCATA TCATTTTGCA ACGATGGTGT GGTATGCTTA ATGTCGCAAT	300
	TCAGATTTTA GGATCGCAAA ATGACTCATA TATAGCATGC CAAGTGGCAA GTATCATACG	360
30	ACATGGnGTG TCAGGCATAn GGTCATACT GTGCAATATG	400

(2) INFORMATION FOR SEQ ID NO: 931:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 543 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 931:

	CCAATCAATG TTGCCAATGG ATCACCTAAT GACAACCAAG TAATTGCTAC CATAGTAACT	60
45	GCTGTTTTAA TTTTACCTAA TTGACCAGCT GCACTTACGA ATCCTTGTC AATTGTAGT	120
	AAACGTAAAC CAGTTACGGC AAATTCTCTG GCAATaATAA TGATTGCTAC TACAGAATT	180
	GTTAGTCCTA GTTGCACAAG TACAATTAAA GCACTTGCAA CTAATAATTT ATCCGCTAAT	240
50	GGATCCAAAA ATTTCCCAT ATTTGTAAT AAATTCCATT TTCTAGCTAA ATAACCATCA	300
	ACAAAATCGC TAAGGGAAGC CAATATAAAA ATAAAACCAC TGATTAAATA CTCAATTCTT	360

ATAAAACTG GTATTAACAC TACTCTAAAA ACCGTAATCT GGTTCGGAAT ATTCATTATA 480
 CATCCTCATT TCTCACTAAT TTATTTCTGT TAAAAATATT AAAACTAACC ATGATCCATA 540
 5 ACC 543

(2) INFORMATION FOR SEQ ID NO: 932:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 932:

GATTGCGAAT GAGATTAGTG GGATGATACC GGTAGAATGG GAGCAAGTAT TTACAATAGC 60
 20 TTATGTAAC TATCAAGCTG GAGAAGTCAT CTTTAATTAT ACTAAACCAG ATAGTGATGA 120
 ATTAAATTAT TATTCAGmCA TACCTAAAGA TTGCAATGTC TCAAAAGATA TTTTAAAGAA 180
 TTCATGGTTT AAAGTTTATC GAATGTTTGA TGAGTTAAGA GAACTTTTA AAGAAGAAGG 240
 25 GCTTGAACCA TGGACATCAT GCGAATTTGA CTTTACAAGA GATGGCAAAT TGAATGTATC 300
 TTTTGATTAT ATAGATTGGA TAAATACAGA GTTTGATCAA TTGGGCCGTC AAAATTATTA 360
 TATGTACAAA AAATTTGGGG TTATACCAGA AATGGAATAT 400

(2) INFORMATION FOR SEQ ID NO: 933:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 759 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 933:

ATTTTTACAA AGAAATAGTA GTCTTATATA TCTTAACATT TAATAACTAA ATCAAACATA 60
 TTTTGAGCCT TTTTTTGAAA ATTAACATTT TAACCTTTTT GATTTTACAA CAAATTATAG 120
 45 CTACGTATTG AAAATTAAAG CmTTGGtTTA AGTGTGTGT TAAAgyTTT TATGTTTAGA 180
 TTGTTATATT ACTATGTATT CTTAAATTTG TTTAAAAAT TAATGCTTTA AATTGATGTA 240
 TAATGGGAAT AAGAAATAAA TAAAAACGAC CCGCACGATT AACGTACGGG TCCACTACTA 300
 50 AAGGGAGTCA AATTTTACC TcGTTTGTAT CATGCAGCGT TTTACACATA CTTTAAAGAG 360
 ATGTTTATTC GTTATCGAAG GTACACCTTT ATTATAACTT ATATCATTTT TATTAAAATA 420

ATAATGATTA TTAAATAGTA ACTAAATACA AAATTACATG GGGTGAATGA TAATGAAACA 540
 ATACTTAATT ACTGGTGGGA CTGGTATGGT TGGATCTCAA TTAGTTAATG AAATTAAAAA 600
 5 ATCAGATTCA CATATCACGA TATTAACGCG ACACGACCAA ATTTCAAATG ATAAGAAAAT 660
 TTCATATGTC AACTGGGCTA AATCTGGGTG GGAACACAAA GTTCCTCAAA ATATCGATGT 720
 GGTCAATCAAC TTAGCAGGTG CTACATTGAA TAAACGATG 759

10 (2) INFORMATION FOR SEQ ID NO: 934:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 934:

GATCAAGCTG GGGAAGTCAT TTTTAATTAT ACTAAACCAG GTAGTGATGA ATTAAATTAT 60
 TATTCAGACA TACCTAAAGA TTGCAATGTC TCAAAAGATA TTTTAAGAA TTCATGGTTT 120
 25 AAAGTTTATC GAATGTTTGA TGAGTTAAGA GAAACTTTTA AAGAAGAAGA GCTTGAACCA 180
 TGGACATCAT GCGAATTGTA CTTTACAAGA GATGGCAAAT TGAATGTATC TTTTGATTAT 240
 ATTGATTGGG TGAATTCAGA ATTTGGACCA ATGGGAAGAG ACCATTATTA TATGTATAAA 300
 30 AAATTTGGnA TTTGGCCTGA AAAAGAATAT GCCATAAATT GGGTTGnAAA AATAAAGnTT 360
 ATGTTAAGAG CAAGnTTGAG CTGAACTATA GGGGAGATAA 400

35 (2) INFORMATION FOR SEQ ID NO: 935:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 345 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 935:

CTGAATATAA TTTTnCAAC TACATCTCGT TTATTAGACA CCGTGCACTG ACTAAGAAAA 60
 TTTCTCTTGA CTCCATTAGT CCTGACGAAT ACTAACATTT AACTACCTTG CTCATCGATA 120
 GAAACAACCTT GTAATGTTAA TTTCCCTTAT TTTCTTAGTT TTAATCTATC AGCGATTAAT 180
 50 TCGATTGCAT CTTTTTCATA AGCAATTGGA TAAACTTGAC CGCGGTACAC CTAACGCTCG 240
 AAATATGATT TnTATCGTC ATAATCTAAA ATATTATnGG CAAAATCACA GCAGTTTTCA 300

(2) INFORMATION FOR SEQ ID NO: 936:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 619 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 936:

GTTATCATCA TCTTCTGAAG TATCATCTTG CCCATCGACT TGA CTTCAT CAGTTCTCTT 60
 TAAATCATCA AACTCTGGAC TAGCTAATGT ATTATATAGT GTTTTAGGTA AGTAATAATA 120
 TTCGTTTAGC ATATCTTCTT TTA AAATATC ATCTACTTGA TACATAATTC TTTGAGCCAG 180
 ATACATATTA TCTTCAGAAT TTTGATTTTG GAAAAAATTA GGTAAATATA AGAACATATT 240
 TACTAAAATA TCATCTAAAT CTGAATGTAT AGATGGTATA TCAAAGAAAT CTTGGCTTAA 300
 AAATGCATGT TCTAAATACA AAAATAATAA ATCTGTATAT TGTGTTTITAG TACGATACAC 360
 TTTAATTTGA GATTCCGTAT ATGATATACG TGTATCTAAG CGAAGATCAA TTAATTTAGC 420
 AGTACTTGGG CGCTCAACTT TAATAGAATT TAATACGCGC ATATCTTCTA ATAATTTAAA 480
 AAGTGTGG ATAAAATTTA GGGtGTTTAA AAGTTTATC TTGLACTACT TCATTTACAA 540
 TTTGTACATC CatCATATGA TAACCGTAAG CAGCTAACAT AACATCTGTT TTTAAACCAG 600
 CCATTTGAT ATGGCTTGG 619

(2) INFORMATION FOR SEQ ID NO: 937:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 615 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 937:

TAATCCCTTT CATAATGGGC ATCAATATCA TATTAATCAA TCTAAAAAAC TTACAAATGC 60
 TGACGTTACT ATTGCAATAA TGAGTGGTAA CTTTGTCTATG CGTGGCGAAC CAGCAATCTA 120
 TAATAAGTTT ACTCGTGCAA AAATGGCATT ATCAACAGCT GATTTAGTTA TCGAACTACC 180
 AGCAACTGCC AGTTTATCAT CTGGcGATCA TTTTGCCGAA CTAGCAGTTA AAGTCGcGGA 240
 TTATATGAGT GTCGATACAA TTGCATTTGG TAGTGAAAAT AATGATATCA AAACATTAAA 300
 rCmATTAgCA CACAGCATTa ATGaAATTGA mCAATCTGaa TCCTTTTCAC aAAAAGTrAA 360

AAGTCCTAAC AACATACTTG GTATTAGTTA CCTGAAAGCA ATTGCTAAAA ATGCTAAAAA 480
 CATCAATGCA ATTTCTATCA AACGAGAAAA TGCTCAACAT CATGATTCAT TAATTCAACA 540
 5 CCATCAGTTT GCAAGTGGTA CATCTATTAG AACATCAATC ATTAGTCAAG ATGATCATTG 600
 GCATCATGTG GTACC 615

(2) INFORMATION FOR SEQ ID NO: 938:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 938:

20 AGAATTGAAG ATGGTAAAGT TTCAAAATAT CATTGGTTA TCATAAAGA CGCACAAGCA 60
 ACTTCACCAT ATTCAATTTT TATCAGAGGT GCTATTTATC GCTTGAACC ATTAGTATAA 120
 ATATACGTAA GTGCTATGAG CGAGAATGCC CATATGAATA ATGACAAGCA CAATGGAAAG 180
 25 AATCGTAATA TATTATTTAA TCGTGATGCT TAATTAAAAT GAAAAGATT GATAATATAA 240
 ATGTGAAAAA GTAAGTATAC CCGTAACTA AAGTATTCAC GGTGAGAGGT GCTCATGTCA 300
 TAATGATGCA CGTGTCATAA TTATAATAGC TTAATATGT CCATACAACA CCATGTAGAT 360
 30 ATGCATATAC AGGGTATGAT AGACATAGnG TCTGnGAAAT 400

(2) INFORMATION FOR SEQ ID NO: 939:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 466 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 939:

GTACAGGTAT GATTGGTGAT CCCATCAGGT AAATCAGAAG AACGTGTGCT ACAAACAGAA 60
 45 GAACAAGTAG ATAAAAATAT CGAAGGTATT AGTAAGCAAA TGCACAATAT TTTTGAATTT 120
 GGAACAGACC ATGGTGCAGT GCTTGTTAAT AATAGAGACT GGTTAGGACA AATCTCATT 180
 ATTAGTTTTT TACGTGACTA TGGTAAACAC GTCGGCGTTA ATTACATGTT AGGTAAAGAT 240
 50 TCAATCCAAA GTCGTTTGA ACATGGTATT TCATATACAG AATTCACATA CACGATTTTA 300
 CAAGCTATTG ATCTCGGTCA TTTGAATAGA GAATTGAATT GTAAGATTCA AGTAGGTGGA 360

GTAGATAAGC AAATGATTAA TAGTTGAGGG GTATGTCGAT GAAGCG

466

(2) INFORMATION FOR SEQ ID NO: 940:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 329 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 940:

ATGAATCACC	CATTGATACC	AATCATTTAC	ATCACTGTCA	TACGAACATA	TATTTAAATA	60
GAAAAAAATT	ATTTTAAAGA	TTATAACTAC	TCTTAATCAT	TTTAGTGAAT	TAAAAAAGT	120
AGTGCAAAAA	GCAAAATATA	CTTTATACAC	TACAAATCAT	TTATTTATAA	TAAAGTTTCA	180
CCAAAAAATG	TTCCAATAA	TGAAACCGCT	TGTTCAAGCAG	TATGATTATn	ACTGTCAATC	240
AATGGATTTA	CTTCAACTAA	ATCCATTGAG	GAAATTAAAT	GTGATTGATG	CAGTAATTCC	300
AATGCnAAAT	GGCTTTCTCT	ATnACTAAG				329

(2) INFORMATION FOR SEQ ID NO: 941:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 315 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 941:

CGATATAGTA	CCAATTTATT	TGAAGAAAAA	TCCGAAC TTC	AAATTTCCGA	TGAAGCAAGA	60
TATACCGGTT	ATTATGATTG	GACCAGGTAC	TGGAATTGCT	CCTTTTAGAG	CATATTTACA	120
AGAACGTGAA	GAAC TTGGTA	TGACTGGAAA	AACATGGTTG	TTCTTTGGTG	ATCAACACCG	180
TAGTTCTGAC	TTTTTATATG	AAGAAGAAAT	AGAAGAATGG	CnTGAAAATG	GAAACTAACA	240
CGCGTAGATT	AGCATTTCCA	AGAGnCCAGA	CACAAGATAT	GACAGCCnCG	ATATGGAGAA	300
GTAACGTTCC	ATGAT					315

(2) INFORMATION FOR SEQ ID NO: 942:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 699 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 942:

5 TACCAATAAT CAACTTGTTT TACATCATCG TGTGTTTCAA TCACTTTCCT TTTTATACCT 60
 TTCTTACCTT TAAAGAATGC ATCAACATCT TTTATTGAAG ATCCTTTTGA ATCTTTAGTA 120
 AATCTATAAT CTGCAAGTTC CACTTTACCC ATTAATTCTT TGTAATCTTT CCATCCTTGA 180
 ATCCCTTTAC TATTCGTAAA CGACTTTTCT GTCATTAAATG GATCCAACCT ATCAAGAGAT 240
 10 GGCGCATCTT TAATTCCTTT CATTTTCTTC TCTATTCTT CATATTTCTC TAAATCTGGA 300
 TCTTTCTCTT CTTCCGATTC TTTTTTTACA GTTCTTGTT TTGATTCTTC TGATTCTTTT 360
 GATGATAATT TATGATTCCC ACCAAAAGAA CAACCTGCTA CGACTAAAAG CATAATTAAA 420
 15 AGTAAACATC CCAGTGTCTT TTTCATAAAC TTTCTCCTCT TAAGTTATTT TGTTTGAATC 480
 AAATAAACAT ACATAAATTT AAAAACTTA TTTATATTGa TATTTTACAT TAACCATCAA 540
 20 TATTTTTTAAA TACTTTAAWT GaTAATTTAA GAAAATTGTT TTGTCTAATA ATTTAAGTAG 600
 TTAAACATA GATAGATATA AAATAGTTTA TAGCCATTAA TTTATAAGTT TAAAATTCGC 660
 ACTATTTCAA TTTGCCATTT AAAAATAGTT TGTTTAATC 699

25 (2) INFORMATION FOR SEQ ID NO: 943:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 30 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 943:

35 CGCTCCATAA ATCAACAATG TTCGAGTCTG TAATCTAGAT GATAAAACGC CAAGAATGAT 60
 CATAAATGGC ACTTCTAAAC CAGCACATAA ACTAGCTAAA TAACCGACAT GTTGTTCAAT 120
 40 TTCTTTTAAA TAATCAGTAA CAAATAAAGG CATATTCATC GTATACATCC ATTGTCCAAT 180
 GTGTAATAAA ATAAATGCAA TAAATGGTAA TAAAAGCGTT TTGTCTTTAA ACATATTAGG 240
 AGCAATTTTT TCAACATGTT GTTGCGTACT AATAGGTGT TTAATGTTTA AATCCTTATA 300
 45 GAAAAACACT TGAAGTACTA AAGTAAATAA AATGATACTT ATTGGGCCAC CAAACAATCC 360
 AGCATAGCCT TTTAATCCGA TTAATTGGGC ACCAATAAAT 400

(2) INFORMATION FOR SEQ ID NO: 944:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 570 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 944:

5 AAGATGACAA TACTTTGTTT CAAGAATTGA AAAAAGAATT AGAACAATGG GATTTTAATG 60
 TTGCTGGTAT TGAAGATTTC GGCAAAGTAA TGGATACATT TGAAAGTTTT AATCCTGAAA 120
 TTGTTATATT GGATGTTCAA TTACCTAmAT ATGATGGGTT TTATTGGTGC AGAAAAATGA 180
 10 GAGAAGTTTC CAACGTACCA ATATTATTTT TATCATCTCG TGATAATCCA ATGGATCAAG 240
 TGATGAGTAT GGAACCTGGC GCAGATGATT ATATGCAAAA ACCGTTCTAT ACCAATGTAT 300
 TAATTGCTAA ATTACAAGCG ATTTATCGTC GTGTCTATGA GTTTACAGCT GAAGAAAAAC 360
 15 GTACATTGAC TTGGCAAGAT GCTGTCGTTG ATCTATCAAA AGATAGTATA CAAAAAGGTG 420
 ATCAGACGAT TTTCTGTCC AAAACAGAAA TGATTATATT AGAAATTCTT ATTACCAAAA 480
 20 AAAATCAAAT CGTTTCGAGA GATACAATTA TCACTGCATT ATGGGATGAT GAAGCATTG 540
 TTAGTGATAA TACGTTAACA GTAAATGTGA 570

(2) INFORMATION FOR SEQ ID NO: 945:

25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 1241 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 945:

35 CCGAGnCCAC CGTTCCAAAG TCCATTTTTA TCCCCATCCC TCTCTGAATT GAACTATAAT 60
 TTTTGAATTT ATTAATAATG CTATTTTTnT TATTTTATCA AAAACTGATT ACAAATACAC 120
 ATAGAAAATG AAATATATTT TTCTTTGACT ATACATAACT GTTATTTCTT TGGATATTTA 180
 40 TATTAAATGC ATTGGTAGTA GTTGTAGCGC ATTAATGTTT GACGGTGTAT AGTATTAATT 240
 ATATTGAAAG TTAGTTGGAA GTTGATAGTA GGAGTGGGAG CATTGAAGCG ATTTGTGGCG 300
 ACGGTATTAT TATTACTAGT CTTTATATCA GGaTGtGGTA ATGrTaAATA TGTGAAAGAA 360
 45 ATaGATGAAG CAGTTAAaT TCAAAATCaA AAACAAGAAC ACTTGCCCAA AAAAGGCAAC 420
 GGTGATCGTG TTGATCATTT TGAACGCAA GATGCTAATA TTTATGTCTA TGATAAGGAT 480
 AAAATTATCA TTTTAGCTTA TAAACCTTTG AGTAATGATG ATGAAGTGCA TTATTATGCA 540
 50 TATGATTTTA GTGATAAACG TGTATCATAT AAGCAAGATT TTGATTGAG ACGATATTAT 600
 CAACAACATG ATGCGGATTA TCAATGAAGAA AATATGACGA ACTAGATATG AATAGGAGTT 660

GGTAAAAAAG AATCAGCAAC GACATCTTCG AAAAACGGCA AACCATTAGT TGTCGTATAT 780
 GGCGACTATA AATGTCCTTA TTGTAAAGAA TTAGATGAAA AAGTCATGCC AAAGTTGCGT 840
 5 AAAAATTATA TAGATAATCA CAAAGTGGAA TACCAATTTG TCAATTTAGC TTTCTTAGGT 900
 AAAGACTCAA TTGTTGGTTC GCGTGCGAGT CATGCAGTAT TGATGTATGC ACCTAAATCA 960
 TTTTtagatt TTCAAAAGCA ATTATTTGCT GCCCAGCAAG ATGAAAATAA AGAATGGTTA 1020
 10 ACAAAGAAC TATTAGATAA ACATATTAAA CAACTGCATT TAGATAAAGA GACGGAAAAT 1080
 AAAATTATAA AAGATTACAA GACAAAAGAT AGCAAGTCTT GGAAAGCTGC AGAGAAAGAT 1140
 AAAAAATAG CGAAAGATAA TCATATAAaa aCGACACCAA CTGCATTTAT TAATGGCGAG 1200
 15 AAAGTTGAGA TCCATATGAT TATGAAAGTT ATGAGAAGTT A 1241

(2) INFORMATION FOR SEQ ID NO: 946:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1057 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 946:

TAATACAATG ACACCATTTA GCATGACCGT TATCCCTGTA ATTCAGCTGA TATTATCTGT 60
 30 TGCAATTTTA TGTGACGAAC TGTTGCACCT AATTTGATAA ATCAACAAAT ACAAAAAATC 120
 TAAGTTGAAC AATTATGATA CAACCGTGCA AACGATATGT AGTATAACTT GTCAACTTAG 180
 ACTTATTGAT AAATATATTA ATAGTGGTTT ACCATAGCAG GAGATTTTCA aTCAAAATTT 240
 35 TGAAGTAGCG TATCaATCTT TGaATCaTCa ATATATACCT TATGTAAATT TTTCaTATAC 300
 ATCGAATGAG AAAGTGCTTC aTAATTTAAT GAAAAAGATA TATGATCTCC AACTTGATAG 360
 40 TGTCCTTGAC CATTTAAATC AAGCATTAAA TGATCACTCG AAGCGCCTAA AATATTGATA 420
 TGCTGATCCA TAGGTGAAAT ATTATCGACT TTTGTayCTA AATAACCAAT ATCTACAATA 480
 GCTTGTAAGA ATGATTCATG CGTTTGTGTA TTAACCTGAG GTTTAATTTT TAAAATCTCA 540
 45 GCCTCCAATG TAATCGCATC TTGATATAAC ATAGCGATCG CTTGATTGTG CGTTGTATCA 600
 ACACCTCTAA ACAACGTTTC ACCTATTCGC AATTCATTIA TTTTACCCAA ATCATTATAT 660
 AAAAGTTGTG GTAACATGCT CGAATTACCA CCTGAAATAA TTTTCAATCG ATATCCTATT 720
 50 TCTCTTTCAA CAGCTGAGAC GAATCGATTA ATCATAAAGA TATCATCATC ACTTGCGCGCA 780
 TCAGATTTAA AACACATAAA ATTGAATGCT AAACCTACAA AATGGATATT TTTCAAGTGA 840

CAATCTACCA TTAATAAAAT CTTATGTTTT TTTCCTAAAA CTTCTGgCTA CTTCAATTTAT 960
 TTGATGTATG GGTAGATAAT TCCGGTTTGG GATACCTCCA TATCnAACCT TTTTTCCTAA 1020
 TCAATATCCT GGAAAAhCCC TTTTTTTGGG CAGGGCG 1057

(2) INFORMATION FOR SEQ ID NO: 947:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 649 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 947:

GATATCCGCT CGATGAATAT ACCTTTAAAG GTGTTGGTGC AAATTCTGAA CAATTAAGTG 60
 CTATGAATCA TGATTCTTTA AAAAAGGAGT ACATTTCAAA TGACTGTTAA ATATAATCAA 120
 AATGGCGAAT TAACAAATGGA TGGTATTAGT TTAAAAACGA TTGCACAAAG CTTTGGTACA 180
 CCTACCATTG TTTATGATGA ACTACAAATT aGAGAACAGA TGCGCCGTTA CCATCGCGCA 240
 TTTAAAGATA GTGGATTAAA ATACAATATT TCATACGCCT CAAAGGCATT TACTTGCAAT 300
 CAAATGGTCA AACTTGTAGC TGAGGAAGAT TTACAGTTAG ATGTTGTTTC TGAAGGTGAA 360
 TTATATACAG CTTTAGAAGC AGGTTTTTGAA CCGAGTCGCA TCCATTTCCA TGGTAACAAT 420
 AAAACGAAAC ATGAAATTAG GTATGCTTTA GAAtATAATA TCGGTTATTT TGTATAGAT 480
 TCATTAGAAG AAATTGAATT rATAGACCGC TATGCTrATG ATACGGTTCA AGTTGTATtA 540
 CcGAGTTAAT CCcAGGTGgT TG rAAGCcAC mTrCaCaCgA aTTTATTCaA ACyGGGcaaG 600
 AAgGATAGGT TAAAGTTTTG GGATTAAnCC nnTTTCCCAT TAATGGGCC 649

(2) INFORMATION FOR SEQ ID NO: 948:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 472 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 948:

TACAAAGCTT AAAACAGAG CTTAGTyTCG TTGAACCATT AATTAGCCGC TTAGAATTAG 60
 AAGAAGCTAA TGATAAACTA GCTAATATCA ATGATAAGTT AGATGACATG TATGATTTAA 120
 TTGAACATGA AGTTAAAGCT AAAAATGATG TCGAAGAAAC AAAAGATATC aTTACGGATA 180

EP 0 786 519 A2

AAAACTACTA TATAAATGAA TCTGATGCTC AGAGTGTTTCG TCAATTTGaA AATGrAATTC. 300
 aaAGTTTAAAT TTCTGTATAT GATGATATTT TAAAAGAnAT GTCTAAATCT GCTGTGCGAT 360
 5 ATAGCGAGGT TCAGGATAAT TTACAATATT TAGAAGATCA TGTACAGTT ATTAATGACC 420
 AACAAGAAAA GCTACAAAAT CATCTGATT C AATTGCGTGA AGATGnGCAG AA 472

(2) INFORMATION FOR SEQ ID NO: 949:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 949:

AGAGGATCCC AGGCGTTTGT TGATCCAGCA GCCGATnCAG AATACATCTT CTATGCATAT 60
 20 AAACGTTTCA ATTTCGAATT GAAAGATCCA AACTTCACTA GTGAAGAAAA TATGTTTAAA 120
 GATGTATCAG ACAAACCATT AATACCTGCT CGTAAAGCTC AAATTACAAA TGCGAACTAT 180
 25 AAACGACATG GTATGAAGTT GATGATTCTT GGAATGACG AACCATATAA CAATGAGTTC 240
 AAGAAAGATG ATCGAAAATG CGAAGAATGA GAAATTTCAA AGGTGCGCAn GTCAAGCCAT 300
 GTGTCAAGGG GGCATATGAT TTCnGGTCAT CAGTAAGGAC TGTGTCATGC CATGGCCATC 360
 30 TGTTGTACnG ATCTCTAATA GAATCTCAGA TGCCCCGGCAA 400

(2) INFORMATION FOR SEQ ID NO: 950:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 556 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 950:

AAAATCTTCG ATGACAAAGA AATCTAATGA TGTTCTTTA AAATGACCAA ACTGCAACGG 60
 45 AATGATATAA CCACACTTGA GATATGGCGC TTCTTTTTTC AACTTAGTCA TCACATCATA 120
 ATCCAAAGAC ATCACACGAT ATTGATGTTT AACACCATGC TTTTTCAAAA TATCAATAAC 180
 ACGTTGTGTA TAATCTGCTG GTTCTTTACC ATGTGGCTTT AACTCTACTA GTAGCTTCAC 240
 50 ATTTGATTGT TTAGCCGTTT CAATAAATTC GTCTAAGGAT ACAAATTTTG CTTTCATGTCC 300
 ATTTTGACGC ATTTTCAAAC CGACGATATC TTTGAAATTA GATTCAGAAA TATTTTATT 360

CATAATTGTA TCTAACTCAA CGTATTCGAC ATTGCGTTTT GCAGCAGCTT TCAATGACGG 480
 AATAGAATTT TCAACACCTT TATCTTCGAA ACCACGTGGC CAATAATGGA GATATTGTAA 540
 5 TTGATAGTAT TATTGG 556

(2) INFORMATION FOR SEQ ID NO: 951:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 469 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 951:

TTGTGGTAAT GATGTTAATC AGTATATTTT TACTTTTGAC AATGACATCT AAAGGATTAA 60
 20 GCAATCTTAG AGTAATAGAT GATGAGGCAA ATATCATTTT TTTTATTACT GAATTGAATT 120
 ATATTAAGTC GCAAGCTATA GCAAATCAAG GATATATCAA TGTTAGATTT TATGAAAACA 180
 GTGACACTAT TAAAGTAATA GAGAATAATA AAATACGATT TCTAAAATTA AAAGTAGGCA 240
 25 AAATAATTAA TGTTGCAAAA GTTGATATTA TTGCCTTTGA TAAAAAAGGG AATATCAATA 300
 AATTTGGTAG CATAACAATT TACAATAACA ATTCAATTTA TAGgAATAAT ATTCCATATT 360
 GaAAAAGGCa AGAATTCGTT ATGAAAAGCT ATAAGTGTA AGGTTTCATTC TTAATAGATA 420
 30 GTATGGCTGG nTTTTTGCCA ATTGGGATTG nATTACATTA CTATTGATT 469

(2) INFORMATION FOR SEQ ID NO: 952:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 730 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 952:

ACATnTATAA TnCTTATTGG CTTGCTCCTT TCACTTTTTA AGAGTAAAAA ATAACCTGAA 60
 45 ACATAACTTT AACATCCAAG TTTCAGGTTA GTGTAATGTA AATGATTTAC TTTGTTnTAT 120
 TATGATTAAA CATCTAATTC TCTGCTTGTA AGTGCTTTAA TCATCTCTGG ATCAGCATGT 180
 GAGAAAAATT GGCTATTACT TTCTTCTAAT GTCGCAATTT GTTGTTTATC TTCTTCTGTA 240
 50 AGTTCAAAAT CAAATATATC TAAGTTTTGA GCCATACGTT CTGGATTTAC TGATTTTGCG 300
 AGTACAACAA TGTCACGTTT TACTAACCAG CGTAAAATAA CTTGTGCAAT TGATTTGTTG 360

AATGGTGCCC AAGCTTCTAC CACAACATTT TCTTGTTGAA GTGCTGCAAC TTGTTCTTCT 480
 TGTGATGGA ATGGATTAAT TTCTATTGG TCACTTGTG GTTGAATTG ATTGTGAATA 540
 5 CCTAAATCTA CAATTCGATC AACGCCGAAG TTAGATACAC CGATTGCTTT AAATTTTACC 600
 ATTTTCTTTT AACTCCTCCA ATGCACGCCC ATGGAGCCAT ATACnGCCAT TGGTAAAGGT 660
 TGGGTGGAAT nAAGCACCTA GGATCCAGGA TAGGTCCCAA ATTTTAATCC GGTGGGnAAT 720
 10 GGATCGGTTT 730

(2) INFORMATION FOR SEQ ID NO: 953:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 953:

ACAAATGACA ACGTACAATG ACGTCTTCAC AAACATGCAT TTTAGGAGAT TGATTATTAC 60
 25 AAATATCCAG TTTTTTGTTA CATCTATTG CAAATCTGCA CTTATTAACG TGAAATGCTT 120
 GGATTGATGG CACAATTCCT TCTATCGTTT CAAGTCGTTT CTGCTCTTCT TTAAGTTTTG 180
 GAATTGTTGA TAATAATTTT TGGGTATAAG GATGTTTCGG ATTGTGTAGT ATTTCTTTTA 240
 30 TGCCTCCAAA TTCTACAATT TGACCTGCAT ACATAACTAA GACTTTATCG CAAAACCTCAG 300
 CAACTACACT CAAATCATGT GTAATCATCA TAATTGCCAT TTGCGTTTCC TTTTGCAATT 360
 CTTTAAATAA GTCTAATATT TGCGCTTGAA TCGTGACATC 400

(2) INFORMATION FOR SEQ ID NO: 954:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 251 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 954:

TAAATCTTGA GGACGTTTGG TCTGAAAGCG ATGCTCAACT GTTGATAAAT CCAATTCGAT 60
 AACATCTGTA TAATTAGGAT CTTCTTTCTC AACATCAAAn ACATATGGTT TTGTTTCAAA 120
 50 TATTCTTTTA CTAGCGCGAT ATGTTCTGCT GATCTACCAG TTAAC TTCAT ATATTTAAGA 180
 ATTCTCATCA ACTGGGGAAG AATCCGCAAG TTGCTCCATA CTCTGGTGCC ATGTTTnCAA 240

(2) INFORMATION FOR SEQ ID NO: 955:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 514 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 955:

AAACATTTAC ACAAGTAGTA GAAGCAATTT ATGATGAAGA AGGTAACAGC TTaGamgCGG 60
 CGCGCCATCC attACAAATC GTTCAAATTA AAGTGGATCG CCCGATATAT CCAAACAACA 120
 TGATGAGAAA GGAAATTGGC TAATGAAAGC TACTACAATC ATTGGCATAG CTGGTGGATC 180
 TGGCTCAGGA AAAACAACCTG TAACTAACGA AATTATGAAA AACTTAGAAG GTCATAGTGT 240
 CGCTTTACTT GctCAAGATT ACTATTATAA AGATCAAAAG CACTTGACTT TCGACGAGCG 300
 CCTAGAAACC AATTATGACC ATCCATTTGC ATTCGATAAT GATTTATTAA TTGAAAATCT 360
 TAAAGACTTG AAAAATGGTA AAGCAGTAGA AGTACCGACA TATGATTATG CtAGTCATAC 420
 AAGAAGTGgA CATTACCATT GGATTTTtAA ACCTAAAGAT GtTTATTAT CGTAGAAGGG 480
 CCTTTTTCGC CTTTAGGAAA ATAAGGGTAT TTAC 514

(2) INFORMATION FOR SEQ ID NO: 956:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 956:

ATTTTAACGA ATATCTTGCC GTACGATGCC CAAGCTGCAT CTGAAAAGGA TACTGAAATT 60
 ACAAAGAGA TATTATCTAA GCAAGATTTA TTAGACAAAG TTGACAAGGC AATTCGTCAA 120
 ATTGAGCAAT TAAACAGTT ATCGGCTTCA TCTAAAGAAC ATTATAAAGC ACAACTAAAT 180
 GAAGCGAAAA CAGCATCGCA AATAGATGAA ATCATAAAC GAGCTAATGA GTTGGATAGC 240
 AAGCCATAAA GTCTCACCTG AATGACGGTC AAGTGATAG CATAATAGTC ATGCTAAGTT 300
 AATGAGTCTC AATGTGTAGG GCACAAGTGC GGGCGTCTAT GCATGAATGT TGCCACGCTC 360
 ACAACTGGGA AGTGTAATG TGA CTGTA 388

(2) INFORMATION FOR SEQ ID NO: 957:

- (A) LENGTH: 394 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 957:

10 AACAAAGTAC ATCGCAGTTA CGAGAAGAAA TAAATGCATT GTATAATCAA GTTATAGAGG 60
 TTGGACAAGC GTTATCAAAG CAGCGTCGTA TAGTCGCTAG GGAGTTAAGW GACCACATTG 120
 TATCGGAAAT TCAAACTTA CAAATGAAAG ACGCAAATCT TGAGATTTC A TTTAAAAAAT 180
 15 TAGAAGAACC GAATATTGAT GGAATCGAAT TTGTAGAATT TTAATCAGT CCAAATAAAG 240
 GGGAAACCATT AAAAAGTTTA AATAAAATTG CGTCAGGTGG AGAACTTTCT AGAATTATGT 300
 TAGCGTTAAA AAGTATTTTT GTTAAATCGa GAGGTCAAAC TGCAATTtTr TTcGATGAGG 360
 20 TTGaCTCAGG TGTATCTGGr caAGCTGcAC CanA 394

(2) INFORMATION FOR SEQ ID NO: 958:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 503 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 958:

CCGCCATTTT TTTTCGATTTC TTTTCAAGT TTTTCACGGT CTTTGAAGA TAGACTATTG 60
 35 AAATCTTTTG CACCACTATC ATCAAATCA ATATCTGCTT TCAATTTTGT GCTAGATTTT 120
 AAAATGAAAT TAATTGGTTC TTCAGcATAt TTGATGCCGA TATyTAACGT AGATTTCTGA 180
 GTGTTATTyT TTACGTCAGA ATCTATATTA TTTCAAAG TGAATTCATT TTCGTCGCTA 240
 40 TATTTATCTA ATGCGACAGT GATTTTACCT TTATCTTGAC GTTTTGCGC ATCTACTTTT 300
 TCTTGGTTAT CTAATTTGAT TTTTGATTCA TCATATTCTG TCTTTTACC AAATTCGTAT 360
 TTATCATTAT ATTTATtATC TTTwTCTTTA GAAGATACGC CTTTAATTGT ATATTCGCT 420
 45 TCAGCATACG TGTATTTATC TTGATCGAAA TCAAGTGCCT AATCTAGTTT TAACTTATCG 480
 TCTTCTAAAG TATTAGTACC TTT 503

(2) INFORMATION FOR SEQ ID NO: 959:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

EP 0 786 519 A2

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 959:

	TCAAACGTAC AGAGCTTGTT AAGTGTTTAG ATTATTTACG AGAGAGCGAC ACATTAGTTG	60
5	TCTATCAACT TGATCGGTTA GGTAGAACGA CAAAACCTATT AATTGAATTA TCACAATGAT	120
	TCGATGATAA CGGAATTGAC TTACCAATATT AGTAACCTGA ACATTTCCAC GAAAGACCCC	180
10	ATGGGGCCAA AATGTTTTTA CCGATGATGA GTGCCTTTTT CCGGGTTAGA AGTTAATTTA	240
	CTATGTGAGT GTATAAAATA GACTnAGCAG CCACAAGnCG AGAGGCCGAA AAAAGCGGGC	300
	GCCCTCT	307

(2) INFORMATION FOR SEQ ID NO: 960:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 960:

25	ATAAGGACAT TTATAGTCGC CATATACGAC AACTAATGGT TTGCCGTTTT TCGAAGATGT	60
	CGTTGCTGAT TCTTTTTTAC CGCAAGCTGT TAAAATTAAC ATGCTCACTA TAAATAATGT	120
30	TAGTAATTTT TAGTCCATAA TTACTCCTAA TCCTAACCA n GTCnGCnAAA TTTCTCCAT	180
	GATAATCCGC ATCATGTTGT TGATAATATC GTCTCGAATC AAAATCTTGC TTATATGATA	240
	CACGTTTATC ACTAAAATCA TATGCATAAT AATGCACTTC ATCATCATT CTCAAAGGTT	300
35	TATAAGCTAA AATGATAATT TTATCCTTAT CATAGACATA AATATTAGCA TCTTTGCGTT	360
	CAAAATGATC AACACGATCA CCGTGCCTTT TTTGGCAAGT	400

(2) INFORMATION FOR SEQ ID NO: 961:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 961:

50	ACAATTAGTT ATACCCAAAA GAGTTATGTC AGTGAAGTAG ACAAGCAAAA CTCAAAATCT	60
	GTTAAATGGG GTGTTAAAGC AAACGAATTT GTTACGCCTG ATGGAAAAAA ATCTGCGCAT	120

GCTCCTGATA ATCAATTGCC ACCTTTAGTT CAAAGTGGCT TTAATCCATC GTTTATCACT 240
 AACTATCAC ATGAAAAAGG TyCagTGATA CGAGTGaATT TGaAATTTCa TATGGTAAGA 300
 5 ACTTAGATAT TACCTATGCG ACTTTATTCC CTAGAACTGG TATTTACGCh GGAAGGAAGC 360
 ATAATGCATT TGGAAATAGG AACCTTGTAn TTAnGTATGG 400

(2) INFORMATION FOR SEQ ID NO: 962:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 962:

20 CTTTTACAAA GACAAATTAG CGGTAATCGG TAAngATCGT TGTTGATCCA GTTGCACTAT 60
 TGAAAGAATT AGACGGATTA AATGAACGTG GCATTCCTAC AAGTAATTTA CGTATATCTA 120
 ATCGTGCGCA AGTGATTTTA CCATATCACT TAGCACAAGA TGAATATGAA GAACGTTTAC 180
 25 TGGTGACAAT AAGATTGGTA CACTAAAAAA GGTATCGGTC CAGCATATGT AGCCAAGTCA 240
 CGTATCGGTA TCGTATGCAG ATTACTTGAA AAGAACATCG AAGATATTAA ATCAACATGA 300
 TATAACCAGC TATTCAAGGA TGTTACGAAC ATGnCACATT GATGAAnCTT GAGATATA 358

(2) INFORMATION FOR SEQ ID NO: 963:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
 35 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 963:

40 AGTGAGCAGG TTGAAGTAGT AGGGCCGATT CAAATGGAAA GAGATACACA TAAAGATGGT 60
 AAGGTAAAGT GGCAATTGCT TTATATAATG AATCAGGATG ATGATGAAAT TAAGCCACCA 120
 45 TTTTTTATTC AATGGGAGGA AAGTGATTCC ATTGCGTACT AAAAAATTGC AAAAATATTT 180
 TCAAAACCAT TTTCAATTGA AACTGTATTG TGAAAGTAAA ACCGTCACAA CAGTATCGAT 240
 50 TGGTTGAAnT GGTTGnAT 258

(2) INFORMATION FOR SEQ ID NO: 964:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
 55

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 964:

	TTATCAAACC GCCATAGCCA CATCTCGATT CAAGGATAAA TTTGTTTTCT CATATCTTAT	60
10	CTCTCATGAC AGTGCACGAT ATATATCTTT TCCAAATATT CATCACTTTT TTCCTGTTAA	120
	AATCATTTCT ATTATTAATG CTTAATGAC AACTTATTTA ATTTATGCA TTTAATGCCC	180
	TGCTTCATTT TCAAATATTA ACTTTAATCG ACTAGCTCAT CACACTATTT ACCCTTTCCA	240
15	CCTATCACTA CTGAATTCAA AACGATTTGT TTACAAATCC CCTTATGCCA ACGGTCGAAT	300
	TTCATCATGT TTACATTTAA TTGCAAATGC CCTCTTGAAA TATTTTAAAA TTAATATTAT	360
20	TCTTAGCATA CTAGTCGGAA TTATATTTC	388

(2) INFORMATION FOR SEQ ID NO: 965:

(i) SEQUENCE CHARACTERISTICS:

	(A) LENGTH: 602 base pairs
25	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: double
	(D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 965:

	AAAGTGAGGT ATAGTCCGAC CATACTCTAA AAACGTAGCG AGATAAATAT ATTTCAATCC	60
	TAACTTTTAT GTTTTGAGGC ACTTGCCATT TAGGATATTG TCGTTCGTAA TACGACACTT	120
35	GTTGTATAAA TACACCTAGT CCAAATGGCA GCATCATGAG TAAGATACTT CTTAAATAAC	180
	TTAAACCAAT ATCATGCCAT ATGTGTCCAA TAATCAATTG AAAGACAATG ATAGATACTA	240
40	TTAAAACGAT TATATTTATT GTCACCTGTT CAAACGCACT CCTTTTCCAA ATAATAGAAT	300
	TGCTGCTTGC ATGACAACCA TAAAACATAC AAACATAGCA GTTTTAAGCG TTAGACTTTC	360
	TAGAATGTGa TTTAGAACAT GTAAGGGCTC ATTAAAGAAA TAAACGGaAT GTAAGCGTAA	420
45	GAAACGACCA ATATAAATTC CGAATCCATT TAAAACATT AGcACGaCAA CrATTAATCT	480
	ATTaAGCCAA CGGTGaGaAG TCAATGtTAG TATTTCAAAA TAGATThAAA TCATCACATA	540
	AACCGCTAAG AAGACACCAA GCAGTAAATA GGTAAAGTAT TTCCACTCAC TTAAATTTAG	600
50	TC	602

(2) INFORMATION FOR SEQ ID NO: 966:

(i) SEQUENCE CHARACTERISTICS:

55	(A) LENGTH: 744 base pairs
----	----------------------------

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 966:

	GTCCTAAGGT AGATTTATCT ACAACTGTTG TTATTTTAnC AATTATTGGA GCGATTTTAT	60
10	TAATGTTTGC TAGCATATAT TTTATnAAAA TTGTGACATC ATACTTTACT AAGAACTTT	120
	TAGAAATTAA ATTTAATTCG AAATAGTATT TTCAATGAAG TGCTTCAAAG CTAAACTTTC	180
	ATGACATTTT TTTGAAACTA GAGAAAATGG CTCATCAACT TCTAGCtGAA TGCCTTCTTG	240
15	AAAATGTATT AATGTTGAAT TCTCTATGGC AGTCATACCA ACAATATAAT GTGCATTGAT	300
	ATAAATTTGT ATCGGTGCAC GTTTATGTTT TAACGGAAAA AGTATAGTTT TTGGGTTGAT	360
	GTAAATAGGA ACCAGTTTAT TAATATTTAG TATGTTTTTT GCAGTCtCAA TTAGCACACT	420
20	TTGTGATGAT AAATGCAATT TCGCATAATA TGraACGAGT TTGTTAATTG GAACTTTAAG	480
	AATGTAATCG CAATGTAAAA AGACACAATT TGTTCGAGA TGGTTTGAAG TAGCAGTTTG	540
	GATATAAAGT AGATATTTAG TAGAATTGTC TTGCAAATAT AGTACTCCTC GTTTAATAAG	600
25	TTGTTAATTT AATGGTTAAA ATAAATTTAT ATGAAGATGT TAGGGTGTTC CAACATCATT	660
	AACACATCGA CCGAAATTTT ACAATAAACT AATTAAAATT ATGTTGGCAT TTACGCTTAA	720
30	CGGACATCTT AATTAATTTA ATCG	744

(2) INFORMATION FOR SEQ ID NO: 967:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 503 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 967:

	TACTTTGCAG GAGCATTAGG TATTCTAGCA TTTATAATGT CAATTGTATT GATTCACGAT	60
45	CCGAAAAAGT CTACGACAAG TGGTTTCCTAA AAGTTAGAGC CACAATTGCT AACGAAAATT	120
	AACTGGAAAG TGTTTATTAC ACCAGTTATT TTAACACTTG TATTATCGTT TGGTTTATCT	180
	GCATTTGAAA CATTGTATTC ACTATACACA GCTGACAAGG TAAATTATTC ACCTAAAGAT	240
50	ATTTTCGATTG CTATTACGGG TGGCGGTATA TTTGGGGCAC TTTCCmAAAT CTATTTCTTC	300
	GATAAATTTA TGAAGTATTT CTCAGAGTTA ACaTTTATAG CyTGGkCaTT AWTATATTCA	360
	GTTGTTGTCy TAAwAWTAWT AgTTTTtGCT AATGGACTAT TGGGTCAATA ATGGTTAATC	420

55

TTTTCCnAA_n ATTGCnGGGG AAG

503

(2) INFORMATION FOR SEQ ID NO: 968:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 465 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 968:

15	TACAGGTAAA AAAGGTGGTC CGTTTATCGA TTCATTAAAC CATCGTAGTT ACACGAAAGC	60
	ATATGTTTCA TCAGAAACCG ATATTCCATT TTATGCTGAA GCATTGGAA TTAGAGAAGA	120
	AAATGTTGTA CCAACAGGTG TACCACGTAC TGaTGACTA TTTGATGAAG CTTATGCAAC	180
20	ACAAATTAAA CAAGAGATGG AAGATGAATT GCCAATTATA AAAGGTAAGA AAGTTATTCT	240
	ATTGCGACCG ACATTTAGAG GTAATGGTCA CGGTACGGCA CATTATCCAT TTTTAAAAT	300
	TGATTTTGAA CGTTTAGCAA GATACTGCGA GAAGCATAAT GCAGTTGTGT TATTCmAAAT	360
25	GCATCCGTTT GTAAAAAAta GmCTTAATAT TcaCgTGaAC CATAGACCAT ACCTTAATCC	420
	GATGTGGTCC AGATCCATCC GTGGAAAGTT AAACGGATAT TCCnC	465

(2) INFORMATION FOR SEQ ID NO: 969:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 300 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 969:

40	AATTCGGAAC AACGAGCTGG CAACAACATA AGATGACAGA GGCGAATGGT CAATCAATTC	60
	AAGTTAACTT AAATAATGCG CAAnGCGATT TGGGATATTT AACTGCTGGT AATTACTATG	120
	CAACAAGAGT GCCGGATTTA CCACTAGCGT TGAAAGTTAT GAGGGTATTT ATCGGTATTC	180
45	GTAAAGATGA TACAACACh ATTTACTCAC ACCTATACTC TAAAAGATTh CACACGTCAT	240
	CACAACGGCG ACTTGAGCAA CATGGACAGT TCCTAATGAA CATAATCAAC GGTATTGTTC	300

(2) INFORMATION FOR SEQ ID NO: 970:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 970:

5 ATACGCGAGC GAACGGTGAA GCGACTTGCT GCTGCAAAAC GTCTGCGACC TTGAGCAACA 60
 ACATGAATGG TCTTCGGTTT CCGTGTTTCG TAAAGTCTGG AAACGCGGAA GTCAGCGCCC 120
 TGCACCATTA TGTTCCGGAT CTGCATCGCA GGnATGCTGC TGGATTATCA TCCGATTTTT 180
 10 AAAACGTTAT TAGGCGTTGT CGTTGCAATT CAATTTACAG TACCTGCTTT GATTGGTGCA 240
 TTGGTTGCCA TGAAATTTGA CCTATCGCCA TTAGCAATTG CTGTTGTGGC AAGTGCAGCA 300
 TATGTAGGAA GCGGTGCAGC GCAGTTTAAA AATGGTGCTT GGATGATTAC GGGTATTGGT 360
 15 GATTTAAThA ATACAATGAT TACAGCAGCG ATTGCAGTTG 400

(2) INFORMATION FOR SEQ ID NO: 971:

20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 251 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 971:

25 AAGTGTAAGA TTAGAATAAA AAATTTATAA ACGAATTGAG AAAGACCAAA GCTAGCAATT 60
 30 ATTCAGAAAT TAAATCGAAG AGTCCTACAG TTAATGACTT ACCTGAACGA GATTTATChA 120
 ACAAATCTCA GTATGACCAA TATGGCAAAT GCCGTGTCCA TGTTAACTGA TGAAAAGTAC 180
 35 TTTGGTGGTA GTTTTGAAAG ATTACAAGCA TTGACGACAA AAACAACATT ACCCGTATTA 240
 TGCAAAGnCT T 251

(2) INFORMATION FOR SEQ ID NO: 972:

40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 414 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 972:

50 TGAAGCTCTT aATAAATCTT TTCTGAACA CACACCAACA AAATCGTTAT CTTCAATTAAT 60
 AATAAATAAT GACTTACAT CTCTAAAAA AATTGTACAA ATAGCGTCAT AAAGTGTGTG 120
 ATTCTCTCTT AGCACAACAG GTTGAGACAT ATAGTCCTTA ACCTCAAATT GTCGAAGTTT 180

TTCTAAAAAA CCTGACATTG TTAATATCGC TAAATCTGGT CTAAGCGTTG CTCTTGTTAA 300
 ATTCAACTTA TCTGCTATTT GTTCACCAGw AATGGGTCCT TTAGTTTTAA CAATTCGAT 360
 5 GATTGCTTCT TGTCTTTGAC TGAGTTCTrw AGGkCTTCac CCCTTTtTAT GChC 414

(2) INFORMATION FOR SEQ ID NO: 973:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 747 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 973:

GAAATCGATA CTAATATCTT CTTTATTTAC ACCTGCTAGT TCAGCTTCTA AGTAATATAA 60
 20 TTCGTCGTGt CATAtATATt CGTtACAAaT GAAGGTGTtG AAAaGTaATT AAaTaCTTGT 120
 TTaCCTAAAT CTTTAAaTGT ATCACTTGGA TTACCGTTAA AAAAGTTTTG ATTCTCGAAT 180
 TGATTGAAGT TCAtATCATC ACTTCCATTA TAGAAATTTG TATTACAAAG CCATTATATG 240
 25 AGTAGTATTA AAAAAGTTAA AGTAAAAGGG GAGATAAAAA AGTAATAAAT GGGTAGATTT 300
 GTGCCTGATA AGGAATCAGG GCAAAAGAAC TGAGCATCGA GATTTATACA AGCAATAAAG 360
 ATAATGAATA AACATATCGA TGCATACTTC TGCCCATCAC CTTATGATAG GGAGTTATTT 420
 30 TTTGTGCGAA TAGTCAAAAT TTTTAGAAAC AAAATTCCGC AAATTATTAA TTATATCTGA 480
 TGCTTCTCGT TCTGAAATGT TGAATTCATT AAAGACcTTA ACAGAAATTT CAGCAAGAGG 540
 35 GCTTTTTIATT GCTTTACCTT GTTCTGTTAG AGAAATTTGT AGGTTTCTTT CATCTTTCTC 600
 TTCACGTGTT CGAACAACGT AATCTTTCTT TTCTAATTTT TTAGTAATG GkGTCAGTGT 660
 TCCAGAATCT AAGAACACAC GTTCACCTAA TTTTTTGATG TTAAGTTTTT CATCATTTTC 720
 40 AATCGCCAAT TAAACCAngG TAnCnGG 747

(2) INFORMATION FOR SEQ ID NO: 974:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 974:

TGCTTCCAAG TAATGTGGAC ATTAAATACG AGCTGGGATT GAGATACACC TTGCAATGCT 60

TCTTGGnCAT TTGCATTGCT TCTCCCAAGT GAATGCCTTT AACAGCTTGT GTCATCATCG 180
 ATGACTTGCC ATTGAAATCG ACAACCTTCA CCTTCAAAC TAGCATCTTT TATAATGCCG 240
 5 nCTTCTATAT CAAATGT 257

(2) INFORMATION FOR SEQ ID NO: 975:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 451 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 975:

CAATGGAGCA TATTTTACGT TCGGCAATGG ACATTGATCA nACAACAAAA CATTATATAA 60
 20 mTAATAAAGT AGAAGTTATC AAAGAAATTA TTAAAAAAGT AAGAGGGGGA AATCACGTGA 120
 CATCACAAAA TCCAGAAGTT AATTACGAAG CATTAGCTAA ATATGGCCGC GACTTAGTAG 180
 AAGAAGTTAG ACAAGGTAAA ATGGATCCTG TTATAGGAAG AGATGAAGAA ATTGAAATA 240
 25 CGATTGCTAT TTTAAGTCGT AAAACTAAAA ACAACCCTGT GTCATTGGT GAACCAGGTG 300
 TTGGTAAAC TGCAATTGTT GAAGGATTAG CGCAACGTAT AGTTAAGAAA GATGTGCCAG 360
 AATCATTATT AGATAAACT GTTTTGTAGT TAGATTTAAG CGCATTAGTA GCGGGCGCTA 420
 30 AATATCGTGG TGAATTGAA GAGAGATTAA A 451

(2) INFORMATION FOR SEQ ID NO: 976:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 571 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 976:

AACTATTAAT AATATTAAGT TCACTACAGA TGTTGCTAAT GGACCATAAG TTTTAAAGAC 60
 45 ATCTTCACCTT TTATAACCAA CAATCGCATC TAAAAATTGA ACTAAGATCA TTGCAATGGA 120
 TATAGTTATC AAAAATATAG CACTATGAAT GACTAAAGAA AnAATAGCTA ATAAaAATAA 180
 AGGTAAGCTT CGACTAAGTG cATAATATGC ATTTATATTA TGGCTAGATG CACATGCTTG 240
 50 AATTGAATAA CCTAAACTTA CACTGGCACT GATTATTGTA AATATTGCTA AAACAAAATA 300
 CATGTTAATC CTTCTTTCTA TATTTGGATA TAAACAAGTA CTTGTCTAAA GTTATTTAAA 360

TATAACTATG TCATAAACTG AATTTGTTGA AATTTTTCAT TATGCAAATT TATTAATAAC 480
 AAACAGCTCG AACTATAGCA TCATTTTACT AATGAATGCA TTAAAGTAAC TATGACTAAA 540
 5 AATGCATATT AATTATCATT ATTAAGACTA T 571

(2) INFORMATION FOR SEQ ID NO: 977:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 977:

CCCGAAAAAA TTTAGACATT TTCAAACAGT AACATTTGAA GATTTGTCTA AGCTGGAAAA 60
 20 GAGTAGTATG CCATCAGGGG TCGGTATATT AGGCTATGCT GTTGACAAAG GTGTTGCTTT 120
 AAACAAGGGG CGCATTGGTG CAAAAGAAGG ACCAGATGCG ATTAACAAG CATTTCAGG 180
 TTTGCCGAT TTGAATCCAT GTGnACTTTA GTCnGATTAC CGGAATGTTT ATCCTGGTCA 240
 25 TGGGGGAATT AATTGGATAC CCCAAAAAGG AATT 274

(2) INFORMATION FOR SEQ ID NO: 978:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 877 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 978:

nTnTTACTTC TTCTTTTAAT ATTTCTCGTA TAGCTTCAAA TTTTTCAGTG TCAAACAGTG 60
 40 TTCTTAATAT CCCTTGCTTT TCACGACTGT TTGATATTAA AAAGCGTTTG AATTCACCTT 120
 GAGGCAAAAT AAACAATTGT CGGAATTGAT CTGCATTTAC TCCTAATAAT TCAATAATGA 180
 ATTGGGTACC TGAAATTACT TTACTTTCTC TAATTTTATA CTTGCCATCC ACCATCTCAA 240
 45 ATaCATCAAA TTTAGCGTTC GTTTTTGTG TATTACCTTC TTTGATATAA GGGCCTTGTC 300
 TATGCACTTT ATAAATTGCA TGATTTAATT GAAATTCAAA TGTTACTGAC ATCGGCTGTT 360
 TACCATCAGC GAAATGACTT CTCAAATCAT TTTCTTCTCT TTGTTTCAAGT GATGCTTTAC 420
 50 CAAACAAGGC ATAAGTCATT GCATCAAAAA TCATTGTTTT ACCCGATCCA GTCTTACCAC 480
 TTATTAAAAA CAATTCATTA TTATCAATTT TAGAAAAATC AATTCTTCT TTTAAAAAGG 540

CGTTTTCTAA AATATTTTTT ATCTTTTATG ATTGGATATC CgATAATTCT TTATCAGTTA 660
 TATGTTTATA AAACATTTTCg ATAATTGACA TGTCaTCTTT TTCACTTATT TCyATAGCAT 720
 5 TATTTTCTTC ATnGTAATTA AAAGTTTCAT TCGTCAGCGC TAAAGTATTA GGATAAATTn 780
 GTTTTAAACT CATCATTGGA TCAGTAATAT GAGACATATT TTTAAGTTTA AAATGTAAAA 840
 TAATTATCGT TATnTTTCAC ATGAACTTnT TCATTAA 877

(2) INFORMATION FOR SEQ ID NO: 979:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 624 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 979:

ATTGGTACTA TACCATTTGT CCATTTTAGC GAAGACGTTA AACTATCGAT TAGCTAGTGA 60
 AGAAATTAAT CTCACTATAC CTTCTATACA TAAGCAAATT AAAAATTTAG AACAGCATCT 120
 25 CAATGTGAAA CTATTTGAAA CTTATAAAAA TCAAATTATC TTGACTGAAG ATGGTCATAC 180
 ATTTCTTCCA ATTGCGCAAA GTTTTATTGA ACAATATGAA AGTGGCATCA AACATATCCA 240
 ACTTAAAAAA ACGATGTTTC AATCGAAATT AAATGTTGTC GTGTCTTCAT ATATCGCGAC 300
 30 ATTCATTATG CCCAAATTTT TAAATCTTT CTTTAACGAG CATCCTTTTA TCGATGTTTC 360
 TCTTCATGTC AAAAATGAAA ATATTGAAAA AGATATTAAT AATCATACGT ATGACATCGG 420
 GATTAGCAGA AATCAACCTA AACTAAGAGA AGTTCATTCT GAAAAAGTAT GCGAAGGTAA 480
 35 AATTGTATTG ATTGCTCCCA ATAAAGAGAA TAATCATCTT CTAAGTGGG CATCTTTATT 540
 TGAAAAATAC AAAATAATAA GTGATAACCA TCCAGAATAT TGGGTCATCA CTTAAAAATA 600
 40 ATATTTTAAA TATTTATGAA AAAG 624

(2) INFORMATION FOR SEQ ID NO: 980:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 457 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 980:

TTTGTCCTGT TGCATAAACT GCAGCTAGCA TAATGTTAAT TGTTGCACCT ACGCTAACCA 60

TkGATTCATC AATTTcAGCA CCTAAAGCTT TAAATCCTTT AATATGTTGA TCAATTGGAC 180
 GTGGCCCAAG TGGACATCCT CCCGGTAAAC CAATCACACA TTTTTTAAAT CTACCTAACA 240
 5 TGGACCCCAT CATATAGTAT GAAGCACGTA ATGATTCAAC TTTATTATTT GGTAAATGCAG 300
 CATTTTGTAT TTCAGTTGTA TCAACTTCTA AwTCCGTACC ATTTaGTGaw GcCTTAAtAt 360
 TTAAAtCtkC tAAATAAaCTC aCTAAAGTTT TAACATCAGA GATTThGCGG TAACCCCTCT 420
 10 AATTTcACAT GTCCTTGAGC TAATAATGTT GCAGGAA 457

(2) INFORMATION FOR SEQ ID NO: 981:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 997 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 981:

ATTGCAGCAA CGCCCCCTGT AAAACTACGT ACTCTTACAT TTATGAAACC TGCTTCTTCA 60
 25 AACATGCGCT TCAACTCTTC TTTTCCAGGA AAATTAAACG TAGATTGCTG TAACCATTCA 120
 TATCTTCTTT TTGATTTTGC AAATAATTTT CCAAAAATAG GCATAACAAA TTTAAAGTAT 180
 ACTGCATACA TTTGTTTTAA GACTGGCAAA GTTGGTTGGC TCGTTTCAAG ACATACCACC 240
 30 ATACCACCTG GTTTAAGTAC TCTATTCATT TyTTTTAaCG CGACTAAATA GTCTGGCACA 300
 TTTCTTAATC CAAACCCAAT TGTTACATAA TCAAAAGAAT TGTCTTCAAA CGGCAATTCC 360
 35 ATTGCATCAC CATGAACAAG TTTAACATTT TCCATTGAAG CAGTTTTTTC TTTTCCTACT 420
 TCTAACATAT TCTCACTAAA GTCAATACCA GTAACCTCAC CTGTTGGTCC TACAGCTTTC 480
 CTTAATGCGA TTGTCCAATC ACCAGTACCA CAACAAACAT CTAATGCTTT CGTCCCTTTT 540
 40 CTAACACCCA TGTCTTTCAT GACGCGTTTT CTCCATACTT TATGCTGCTC AAAACTAATA 600
 ATATTATTTA ATCTATCATA TTTTTTTGAA ATATTTTGAA AAACGCGATG TACTTGCTCT 660
 TTATTTGCTT TATTGTCAGC CATGCTTAAT TACCTCTACT TTTTAAATAA CTTTTTTGGA 720
 45 TATCGTGTA GAAATGCTTT ACTTCACTTT GATTATATTT CTGAAGTAT GATGGATAGT 780
 AATCAGACAT ATCTTCAAAT AAATAATTAT ATATTTCCGA CTCATCAATA TTGATACCGA 840
 AATGAGATAA CGTAATATAT GGgAAAAGTG tTTCAATTTT TACTATTGCT TGAGAAATTT 900
 50 CATAATCATT TAAAGCTTGA TGATGTAATG AAGATTTCAA TTCATTAATT TCAACAATTG 960
 CTTTACTAAT TTCATTTTGA AATGATAAAT CATTGAT 997

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1118 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 982:

10	CATTCCCTTT ATCGGnACAA TTATTTTAAA TAATTGGTTA ATAAGTTTTT CTATTAATTG	60
	CTGTTTTACT TTCTAGAGCA ACAATAAATG TTTTCAGTTT AAAATAATTA AGATTGTCAT	120
15	TTACTAATTT GCTTTTTCCA TTCTTTAACC ATAAATCAAC TTGTAATTGC CACTCAATAG	180
	GATGATTTTT AATATAAATT TGCTCTGGAA AAATATAACC ATAATTGTGC ACTACTTCTT	240
	GATCAGTTAA CTGTAATTGA TACATTGCAC TTAAAGTGGG TTCTAAAACA GAATTTTGCC	300
20	AGCGACAATA TTTGATATAT TGATTAATTG CGAACTTTGA TAATTTATAA ACAGCATGAT	360
	AATCACAAGG CGCCTCATTA AACAATCAC TAATTTTGGC ATTTCTTTT TCAGCGACAT	420
	ATTTGTGCCC GCCTAAATAT TGTATTTGTT GAAACATCAT TATTTGTTTT TTCTCTAAAT	480
25	TGAACGTATG AAGTTTTCGA GTGAATGGAT TAATAACAT ACTTTGAAAA TGATTGAACT	540
	TCACTTTATT ATGACAATAA TCAACATCAT TTAmTAACCA ACTTACTTTA TATCCCATT	600
	TCTTKAAACC TTCCGTTTCGT TGAAGAATCT GTTTATAAGG AATTGGCGAA TACTGTAGCT	660
30	CAATAACATA TTTATTATTA ATCAAAATAT CCGGAATTTG TTTTATTTCT TTTAAAAATG	720
	GCTCTATCTC TACTTTACAT CCTTGTGCT GTATCATCTG TGCTAAAATC AATTACTTT	780
35	TATAATGTTT AATCGTTTCA TTATTAAAC ATTTTGTTC CGCTAAATGT TTATGTGCAA	840
	AATGACTAAT TACTTTGAGC CCACGCTTTA AAATAACTTG CTGCCCACAC ACCGGACAAA	900
	AATATTGTGT CTTTCTCAAT GCAGTAGTTG CTAATACGCG TTCCTTTTCT TCATTTAAAG	960
40	CTACTAACAT ATCTTCACCT CAAAATATTA CACGTAAGTT TAACTACTAT TACTTTTCA	1020
	GCTTTGGAAA TCCATTAAAA AAAAGGGACC CCCAAAGGAG GCCTCCTTTC ATAnGTGCGG	1080
	TGGCCTAATT AAATAATCCG TTAATTCCAG GTGGnChC	1118

(2) INFORMATION FOR SEQ ID NO: 983:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

CATCCCCTGT TAAAAATTGn TATTTGTGTA TTGATGCTTC TCAGnCATTa TTACGAGTCC 60
 ATATTCATTG CTTCACTGAA ATATCAGTAG CAATAACATT TAAATCCGGC TTTTCACATT 120
 5 TCAAGGTAAT TGCAGTACAC CACTACCCGT TTCCGATATC TACGGATTGT TGCATCATCT 180
 TCTAACTGTT GGTAAGAAAT GCAACCATTa CTGCTTCAGT TTCAGGTCTG GTATCAAACA 240
 ATTTGAGTTT ACATCAAACG GTCTACCTT 269

10 (2) INFORMATION FOR SEQ ID NO: 984:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 298 base pairs
 15 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 984:

AACCCAAGTG GAAnnGGTTT TGGTGGAAAA ATTTTAGGTC CTTTATCTGT CGTGCGAATC 60
 ATTGTATTTT TTAAACTTTC CGCATAATCT TGATGGTCGA TTAACTTTTC GCGATAACAA 120
 25 TATTCAATCA CTTCAGAAAT CGCTTGCTCT GATATCTCTT CTTTTGTAA ATATTGTATA 180
 ACTTCTTTTT CAGTTCTCTT TTTATATGAT AAATATTGGA TTGCTTTATT TAAACCTATG 240
 CGATAATGAT CATACTTTTG AATCTCTGCC ATGTCAGCAG CnTCAAGTTG TnGCCCTT 298

30 (2) INFORMATION FOR SEQ ID NO: 985:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 431 base pairs
 35 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 985:

CCATGCGATT CCACCTATTA ATAGTAAGAC AATAATAATA GGAATTATAA TTTTAACTT 60
 TTTAGACATT TTGCTTCCTC CCAATTATTT ATGAGTTAAT CATATCAGAA CAATACATTT 120
 45 TATTAAATGG TTTATTTTAA ATTTTGTTTA AATTAATAGA ATTTTAGTTA TAATAATGTT 180
 TAATAAGTTA TTGGrAATCy AATAAACTAC mAAAAATAGT TTGATTACaT AATGATTctT 240
 GAAAAATGkT GGkTAACyTA ATAATATGCA TTTTTTkGGC GArGARgATT tATTtAACyT 300
 50 ATAAAAATAT kGAaGTAAGA TtGGGGAGAT tATGAATTtA TGGrATtGAA AGTCGATGAT 360
 TTTGTAAAGA ATATAAAAAG ACCATACTTG ACTGTATTGG GAGTATTTGT AGTTGCAGTT 420

(2) INFORMATION FOR SEQ ID NO: 986:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 986:

AAGGTTAGGn	TGGAGTACCC	AAAGTAGGTT	TAAAGGTTG	GAAATACnAG	GAGGATGAAT	60
AACATGAATC	AGTCAGTCAA	ATTACTTAAA	CATTTAACAG	ATGTAAACGG	CATTGCTGGT	120
TATGAAATGC	AAGTTAAAGA	AGCAATGCGT	AACTATATAG	AGCCTGTCAG	TGATCAAATT	180
ATTGAAGATA	ACTTGGTGGC	ATTTTGGAA	AGAAAAATGC	TGAGAATGGT	CAATACTCAT	240
TATGATTTCT	GGTCTATGGA	TGAAGTGGT	ATGGTAACAA	GATGTAAACT	GTTATTTCATT	300
ACGCGTGGTG	TGTGATCAGC	ngCACTCAA				329

(2) INFORMATION FOR SEQ ID NO: 987:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 545 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 987:

CATATTATTT	nTATATGAGT	TTACCAGTGT	CAAAAAACA	ATTGCTTAAT	GCCAACTATA	60
TTACATGCAT	TGTTTAAACA	TTAATGGAA	CGCTTGTAT	TAGTTTATAT	GCTTATGAAG	120
CAGATGTGAT	TGAACCAAAT	TCAATCTATT	TTTCAACTGC	ATATGCATTT	GTCAATATCTA	180
ACTTCTTGTC	TATACCAATT	GCATTTAGTC	AATTTACAGA	ATTGCGTAGA	GTCAAAGTGC	240
CATATGGTAT	ATACGTGTTT	ACTATTATCA	TTTTAGTTC	ATTTTATTT	TCAATTGCAA	300
TAGTATTGGT	GAATTATTTT	GTTCTAAGTC	AATCATCATT	CCCAGATTTA	TATTCATATA	360
TTTTAAATAT	TGGTTTCTA	ATTATAAGCA	TTGTTATACT	TATTGTTAAT	TATTTTAAAC	420
AGCTCAATAA	AATAAATACT	AGAAAATTTA	AAGGAGGCAG	TCGATGAAAT	TAGAACATAT	480
TACAAAAAAA	TACGGCTCAA	ATGTCGTTT	AAATGATATT	GATTTTGA	CTTGGCGA	540
TAGAA						545

(2) INFORMATION FOR SEQ ID NO: 988:

(A) LENGTH: 607 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 988:

10 ACCTAGCATG ACATAATCAA ATATATCAAA AACACCTTTC TGAAGTGAAT CAACCGTTCC 60
 AATAGTTAAT GGTCTTTCAG AATCAGATGT CTTTCCACCT TGAACAGTCA GATGACTAAT 120
 TAAATATTG ACGGCATCTT CATCAATTTT CCGTGCTATT GTTTC AATAC AGCGCGTAAT 180
 15 TCCCTGTTGA TGTGTTTCAA TGGTGTGATC TTCAAAGTAG TGTTCATTT CGCTCACAGT 240
 AGCATAAGGG AGTGTATAAA AATTAACCCC ATTTATCTCT ATTGGTGAAT TAATCGATGT 300
 AAAATCTGTT CTTATAAATA ACTGATTATG TTCAAACCAA CTCGCCCCAT AGTTTAACCT 360
 20 CTCTTTACCA TCGTGATTTT CACTAATAAT AATTATTGGT ATACGCAGTT CTAAATTTAA 420
 CTTTCCAATC GCTTGTTCTA ATAACATGAT TGCATCTTTA CTTGGATATG TTGTGTCATA 480
 TAAAcTCCAG CTATCACAAT GrTATCAGGT TCTTCTTCTT TCATTTTTTC TACGAACATA 540
 25 TCTAAAATAT ACGCTTGATC TTCTAAAAGC TGTTTGCCAT CTAATATTTT CCCTAAGTGC 600
 CAGTCTG 607

(2) INFORMATION FOR SEQ ID NO: 989:

30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 722 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 35 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 989:

40 ATCGCGTTAA GCAACAATTA CAACAATCAT CATATAAGCT AACGCCACAA CGCGAACTAC 60
 TGTTAGAGTT CTAATTGAAA ATGAAAAAGA TCATCTAAGT GCTGAAGACG TATATCTGAA 120
 AGTAAAAGAT AAAGCGCCTG AAATTGGCTT GGCGACAGTA TACAGAACGT TAGAGTTGTT 180
 45 AGCTGAACTA AAAGTTGTCG ACAAATTA CTTTGGTGAT GCGGTCGCTC GTTTTGATTT 240
 AAGAAAAGAA GGCGCAAAAC ATTCCACCA TCATTTAGTA TGTATGGAAT GTGGTCGTGT 300
 AGATGAAATC GATGAAGATT TGTTACCAGA AGTTGAAAAT CGAGTTGAAA ATGAGTTCAA 360
 50 TTTTAAAATT TTAGATCATC GTTTAACTTT CCATGGTGTG TGTGAAACGT GCCAAGCTAA 420
 AGGTAAAGGA TAGTAAATTG CGTAGGTTAA ATTAACCTTC GCTTTTTTTTA GAGGTGTGGT 480

55

TAACACAATT GGTGCTTATA GACGTGATTT GAAAAAGTAT CAAGATTATA TGA CTGAACA 600
 TCATATCTCG CATATTGATT TTATAGATCG ACAATTAATT CAAGAGTGTh TGGGGCATT 660
 5 AATAGACCAA GGGCAATCTG CTAAATCTAT TGC GCGATTT ATTTCAACAA TCCGTAGTTT 720
 TC 722

(2) INFORMATION FOR SEQ ID NO: 990:

(1) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 990:

ATCCAAAAA TACGAAAGCG CTTTCTATAT TGGTATGCAA GTATTTCAAA AAGAATAAAT 60
 TTAATTTTCC TACTTTTCTA AACATTTATC TTTATGTATA ATGTTTTCAA GTA ACTAAAT 120
 TATAAATTAA ATAAAGGGAG TGTTTATCAT GCTTACAATG GGGACAGCAT TAAGTCAACA 180
 25 AGTAGATGCC AATTGGCAAA CTTATATTAT GATTGCCGTC TACTTCTTGG GTnATGACTC 240
 CAACTTATTG ATAGTGTTnT TATGTTTCAG ATAATGCCCG ATGACTTTGT CATGCCAGCT 300
 CCACCGATTT TGAGnAACGA CAGCGACTTC CGTCCCCAGC CGTGCCAGGT GCTGCCTCCA 360
 30 GTATTC 366

(2) INFORMATION FOR SEQ ID NO: 991:

(1) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 991:

TGACTACAGT AACATTACCT GTAAATAATG ATTGAATGGC TTCATTTTCA TCATGAATAC 60
 45 CTGTAATAAA TTCTAATTCT TCATCTGAAA CTTTACAAAT ATGCGCCAAT GGCAAAAAGG 120
 TATGAATAGT TTGTCTTAAA TCITCAGCGT TATCCCATAA TGGCAATCTT ACATTAGGAT 180
 CAAATACGAC AGTACCATTG GCATTTAATG TTTTGGAAT CAATTGATAA TGTGCATCTC 240
 50 TCATCGGACT ATCGACCAAA TCAACAGAAC AAAAATGTAC TACATCATT TCATTACAT 300
 CaATATCATT CACAAAACtk GGkTCaAaTA aCATATCn 338

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 992:

```

10 AGTTCATCGT ATTCTTAATA CCTATATGCT ATCGTTCACA AACTTTTGTT CTTTCTTCC      60
AACATACCGC CTATAATGCT CAAAAAGAAA TCAGCAGTGG AACCACTACG TTCCCTACCG      120
15 CTTTATCATT TTCAGGCTTA AATATTTTGA AAATTTTGTT AGGAATCCGC TTAATAAAAC      180
TCATATCTTC AAAAAAATG ACAAATTTTA AATTTTGTGA TAACATCATT TTTTAGTAAA      240
TGTATAAATT TCTTTATAAT ACAAATATCG AAAGAAGGCG ACTGACTTTG AAAAAATTAT      300
20 GTTCATTAAT TGTAGGTAGC ATTAGTTTGT ATCCTTGCCA TTATCAGCTT GTGGnAAAGA      360
ACnAACCnAA A                                                                371

```

(2) INFORMATION FOR SEQ ID NO: 993:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 530 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 993:

```

35 ATAATGATTT ATCAATCGAT GTTAGATGCG GTTCAATTAT ATCCTAAGTC TATCGTGGTT      60
GATTATACTG TGGATGGACA ATACaAAAAT GATTGTCACT ATTTCGGTCA ATCATCGATC      120
AACATTGCCG ATTGGGCTCA AAACAATAAT TATTATCCTA ACCTGATATA TGCGATTCAA      180
40 CAGACTCTTG ATTTAATACA TTATTACTCT GTAGAAACGA TTTTCGATTT AGCTTTATTG      240
ACACTTCTGA AAGGTGATTT ATCAATCGAT GGTCAATGTC TTTTGTGATTT TAAAGCCCCT      300
ATAGCAACAA GTGCTTCAAT ATGGGAAACT ATTAAACTA TTGAAGATTT TGATATGATG      360
45 TCcAGTTTTt TTGATAAAAtG GCTTATATtG ATCATCATCC TATACCTTTT CGCAACCTTT      420
TTATCGAGGA TTCAGAACAA CTTAATTCGC CAGATAATTG GTTGTATTCT ACCAAGTTTA      480
50 TGCTACCTAA ATGGGnTATA TAAATAAGC AAAGCAACGT GCTGATAACA      530

```

(2) INFORMATION FOR SEQ ID NO: 994:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 551 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 994:

	TATTGGATTn TTnCCACCAA AGGCAACGGT TCCTTTTCTA ATTCTAATAA TCAAATCCCC	60
10	ATTAATATCA ATCCCACTCA AATTCITTCA CATCATTGAG TATAAAATAA TATGGTGATA	120
	TACGTTGAAG TTGATTnTCT TATTTAAGTA TACTCCAACA GTATTTTATA AAATTATTTA	180
	GTCATCATCT TCAGTGTTTA ATTCAAAAAT ATAGAATCTA CTGTATTGCA TAATAAATTG	240
15	AAATGCCACA AATTGTGTAC AAGCAATAAT AATGATACTT ACCATTATGA CAAACTTGGA	300
	TTCTACGACA TTGGGCACCA ATATATATTC GATAATTCCTT TCAATATATA TAAATGCGCT	360
	CAACGCGGTT AATAATAAAC CGAAATGTGT TTTaGTTTTA CCACCCCAAC GTTTTGTYAC	420
20	TTTAGGTAAT TTTAATAACG TGAACATTCC GCCAATTAGT AATAACAAAT AACTAATTAT	480
	GATTGAAATC GTACCCATCA ACCAATAATT GAATAGGTCA TAATGATTTT GTACAGCAAC	540
	AAAATAATAA A	551

25

(2) INFORMATION FOR SEQ ID NO: 995:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 729 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

30

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 995:

	ATTCGCCACC ATTAGGTAGT GGAACACGAA CTTTCATC TC TAAACCTTTA CCAATTAACG	60
	CTTTAGCCAT TGGTGATTCA TTTGAAATCT TACCATTAAA TGCATCTGAT TCAGCTGAAC	120
40	CAACGATTTG ATAACCTTTCC TCTTCATCAC CTGGTAATTC TACAAACGTT ACTGTTTTAC	180
	CAATTTTAAC AACGTGTGTTA TCTCCAGTAT CTTCAATGAT TAATGCATTT CTTAACATAT	240
	GCTCAATTCT TTGAATATCT TGTTGATGA ATCCTTGTTT ATCTTTTGCT GCATCATACT	300
45	CAGAGTTCTC TGATAAGTCA CCAAATGAAC GTGCAACTTT AATTTTCTCT ACAACTTCAG	360
	GACGCTTAAC TGTTTTTAAT TCTTCAAGTT CACGCTCTAA TTTTCAAAA CCTTCTTGAG	420
	TCATTGGATA TTGCTTTTGA TTTTCCATAT TGTGATCTTC CTTTACTGAA TTATACTATT	480
50	GCTTGCTAAC TAAAGACTGA ATTTTGTGTT TCATAATATC TATTGCAACT TTATTGCTCC	540
	CACCTTCAGG AATAATTATA TCAGCATATT TCTTAGTCGG TTCAATAAAT TGGTCATGCA	600

55

TTAGTATCTC GTGTTGAAAC GGCCTAATAT nCTCAAGTCT GGCATCTGTA TCAACATATA 720
TnTTnAACA 729

(2) INFORMATION FOR SEQ ID NO: 996:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 325 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 996:

GACAAATATA CTGCTTCTAC TCAAATATTA GTGAACATGA AAAAGTCCTC AAGTGATTTA 60
GCTTTCCCAA AATGTTCAAA GTAGTTTGCA GTCTGTTAAT ACATATACGG AnATTATCAA 120
AAGTCCTAGA TTCTAGATAA AGTATCTAGA GAATTGATGG TCAGTATTCA ACAGCTGAGT 180
GAAATCATT TAAAGTAAC CATCCAACCA ACTCTCAAAT TATTACTGTA CAGTTACACT 240
GGGATAATCT GATCTGACAA ATGTATAAAT ACTAAGTTTT GCCAGCAGCT AAATAGAGGT 300
GTATGTACGA CTTCCAnCTG TAGnG 325

(2) INFORMATION FOR SEQ ID NO: 997:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 271 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 997:

CTTCAGTTGT CGGCAAATCT TCTATATTGG AAATACCama TACATTTAAA AATAAATCAG 60
TAGTAATTAA CTGTTGGCTA CGCTGTTTCAT TAACCACTTT AGCCTCAACT AGTCCTTTGG 120
CAATCAATGT CTTAACTGCA CCATCTGAAT TGaACTACG AATTAAATCA ATATCACTTC 180
TTGATAATGG CTGTTTATAA GCAATAATTG gATAGTACTT CCATTGCTGC TTGTGAtAAT 240
TTCATTGTG aCTTTTGTTC AATTGAATTG T 271

(2) INFORMATION FOR SEQ ID NO: 998:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 498 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 998:

TTTATGTGCT AATTTGTAAT TGAGATTCAT AATGGTATTT AAATCATTAT GGTGCGGGAG 60
 5 TTATGGTATT GCCATAATAT GAGAGTGCAT CCACTTCTAT AAGTAATGCA TATTGCGAGT 120
 GCAGGaATGA ATGAGTGCTT GATTAAAATC CTTATGGGTG GTTGACATAA TTAAAAGAAA 180
 CCACATTTAA AATTTCTTAA TCACAAGCGG TTAAC TAGGT ATAGTTTAGT TTTGAGTAAA 240
 10 TCTTTTTTAAA GGTGTACTTG TGCATTTTAC TTAATTAAAG ACATAAGACA TTAAATCGGC 300
 CTAAATAAAA TAAAAAACTA CCTGTTTAGG TAGTTTTTTT AATGTAATAG ATTAAAAACAC 360
 15 TAGTTCATTT CTTATTAAAG ATGGATAGTT ATTTTATAGA TAAATTTGTC CTTTAGTGTA 420
 GCGGTAATTT TTAGGACTTT TTGGTGnAA AAATGTTCTT AATAAAAGTA ATAGTCCTAC 480
 TTTACCGCCA AAGCCATA 498

(2) INFORMATION FOR SEQ ID NO: 999:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 568 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 25 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 999:

30 TGAGCTGGTT GTTTATTATC ATCAGTTTTT TTCTGATTAT CATCTGATTT ATCTTGAGAT 60
 GCTTTGTCAT CCTTATCTTT CGACTCATCC TTTGATGCTT TATCATCATT CTCTTCTTTA 120
 35 GCAGGACGTT GCTTTGTAGG TGCTTGTTGC TGAGGTGGCA CATATTGATA TTGATTCTGC 180
 TGTGGCAATT GCTGATATTG GTTTGCTTGT GAATCTAGCT CATTCTGCTC TTTTTCCTCT 240
 TGTGCTTTT TCTTCTCTC TTTTCTGCA TTTTCTTTT GACGCTTTT TTTTGTTC 300
 40 TGCTTTTGTT CGTTCAACAT ACGTTCTTTA GCTTTATTCG AATGATCTAC ATATGCAAAA 360
 ATTGCAAATA CTAATCCTCC GAGTAATAGC AATACCGTCG CAATGCTAAC TACTTTCGCT 420
 GTTGACTCA TTTTCTCTT ACTTCCATCT TCATTTTTAT TGTAAGTCGTA ATTTTGATTC 480
 45 GACATACTCT CCTCACTTC AAATAATTT AAATATAGAA ATTATCAGC AACCATTAAAC 540
 ATTTTCACAA CTAATTTGCG ACCnAGTA 568

(2) INFORMATION FOR SEQ ID NO: 1000:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 1441 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1000:

5	AGTGTCTTCTA ATTGCAAAAT TCCAAATACA GTGTCGTTAT TTACTTTTTT CATGCTAAAC	60
	ATCTCCCAAT TAATAATCAC ATATTTAGCT ACTATACAAG TATTAACAAA CATCCCAACA	120
	ATCCCAAAAC TTGTATGTGC TAACTTATGC ATAAAACTAC AAGTGTAAT AAAGTTGCTT	180
10	TCTATTCAAT TGTCAAAGTT GAATAAAATT AAATAAGTAT AAAAACCAAT AATCAATAGA	240
	GTTAATATTT AGAAATAAGA TAATAGTACA TAAACAAAT CACTCTATTA CATATTAATT	300
	TTATAATTTA TATACAAAGA AAATATATCA ATATTACCAT TAAATTGCAA CAATTCTACA	360
15	TATATTTCTT CAAAAAAGAT ACGCATTGAA TTTTATTAC ATATAACTCT CATGAAAATT	420
	GATTAAACTA AATTAATTAG TTAGCCTTAA ATTTAACAAA TTAAATCAA CCGAATGAGG	480
	CTAAATTGGT TATTTTCAA GATATGATT GTATAAATCA AAACATTTCT TACAAATCAA	540
20	ATGTGTATAA AATGTGATAT ACATTTTCAA CCTTAAAAA GTTCTAAAAA AAGATGAGCA	600
	TCTACTGTCT CATCTTTCAG TTCTTTTTTA CGGGTCTGTT TTCTAATTG AGCACAATCT	660
	TCGATTTCTT TATCTAAATG ACTACCAATT AAATCTATTT CTTCTATTGT TAAATCGCTA	720
25	TCTCCATCTT CTTTATCTC TGGTATTATT TTTTCTTCAA CTAAGTCACG ATATAGTGTT	780
	TTTGAATTCT CGTTCAATTT CGATTCGTGA TTTTGAATAC TTTCTCCGC ACCAATGTAT	840
30	ATCTATTGGC ACTAGCTTCT ACTTTTGTAC CATCAATAAA AATTGAATTA TCATCAATAA	900
	GATTTTGCTT TAAACATTGA CTATAGAACT GAATAAATAA AGATTCAATT AACGCATCAG	960
	TATTAGGATT CACTCTAAAA CGATTAAATAG TTTTATAAGA AAGTGTGTTGA TCTTGGGCTA	1020
35	ACCACATCAT TCGAATACTG TCGATGAAGTA ATTTCTCTAT TCTACGACCA GAAAATACAG	1080
	ATTGAGTATA TGCATATAAG ATGATTTTTA ACATCATTTT TGGaTGATAG GATGTTGCAC	1140
	CACGATGATG TCTGAATTCA TCGAATTCGC TATCAGGTAT CGTTTCAACA ATTCATTAA	1200
40	CATATCGCGA AATATCATTT TGAGGAATTC TAACGAAGTT TCTATTGGTA GTGTAAGTTG	1260
	GGGTCATGTT ATAATTTTAA TACATAAGGC ACCTCTTTAA TTTAGTTTAG TAGTATTTAT	1320
	TAAATTATAC GaAGGGACCC AACACAGAAA ATTCATTTTA TTGAATTTTA CATTTATGTG	1380
45	CAAGTTGGGG AAAAATGTCT TATTTTTTCA AAGTATTTAA AAGTAAAATT ACATGTTAAT	1440
	A	1441

(2) INFORMATION FOR SEQ ID NO: 1001:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 587 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1001:

5	TAATAATATC TGTCATATTA AGTCTCCCTC ATTAGAACTC ATTATAAATG AAGTTATTGT	60
10	GTGTGTCGCC ACTGCCATAA ATTAAATATA AAGTAATAAA TATTGCCAAA TACAATAGTG	120
	TTAATAAATA TGGTTTGAAT GCTTCAACAT ATTTATTAGG TGGCTGTTTA CTTTITAGATT	180
	TCATATTGCA CCTCTTAAAG TTCTTAGTAA AAACGCCTTT ATAAAGACCG TTCAATATAA	240
15	AATACGTTTT AAAATTTGTT TTTTACAATT CATTATATCG ATATTCATAA TGAAATTCAA	300
	TTTTAATTTT ATAGATTCAA CATAGTAATT GGTGTGCATC ACTCAAKTAT TGTAAATGAT	360
	ACACTTTGTT GAGACATCA TTCATTTTAA AGGTTATTTA AACAATAAAC AATTACAGTC	420
20	TATATAACAA TTTTGTATA TACGTCAAAA TCAAATAAAC TCATCACATT AATATGACGA	480
	GTTTATAATG TTATTGAATT ATCATCAGCG CAAATATATA CATTGCGAAG TCAAGCATAA	540
	CATATTTAAC AATTGCTTTG CTGCGTTTTA CCAATGGATT AAAAACC	587

(2) INFORMATION FOR SEQ ID NO: 1002:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 522 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1002:

35	CAATTGTGTC ATAATTTTGC TGATGATAAC TAATCGTTTT GGAGTAGCTA TTTGATGAAG	60
	TTCGTCCAAT ACCTTTTGTT GAATCGAATT TACCACCTGA GCGTATATGA AAATGTACTG	120
40	TCTACTTTTG CAGTTGAAAT TTTATTTTTC GGCAATTGGT CTAATATTTT AGTTTACGA	180
	TTTCTTTTTC CTTGAAAATC TACATGGTAC TCACCTGGAT ACTTTAACCA ATTTGAATTT	240
	TTTTCTTCTT TATGAGATTC AAACTTTAAA TTTGAATGAA TTGAGCCTTG TTTTTTAACA	300
45	AGTAATACAT TCTTGTGATA AGTTGGATCA TCGATAAAGT CGAATTGTAA ATTTTGGAGT	360
	ATATTtGTWT TCATCATATA TACTGTTTCA GTTCGTTTTG TGATTTTACC GTTTTTCCCA	420
	ATATCATCCG GTGCTGTTGA ATTTTATCT TTATTAGTAA CATTACGTTG CTTTTGTGAN	480
50	CTTATCAACA TGTCTTCTAT TTGGCTGAnG CTTATGGnGA TT	522

(2) INFORMATION FOR SEQ ID NO: 1003:

(A) LENGTH: 323 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1003:

10 TCTTTGTTTG AGACATAATG TCATGTAAAG TTTTCACAAT GCGTCTTCA ACTTGTGGCC 60
 TTGCCTCTCC TTTGAAAGGA ACAATTCGAT CTCCGAATAA GTCCTCAGGC TTGTATAGAT 120
 TATCAAATAG ATAGACTGAC TCACCTTCAA ATATTCCAAA ATGCCATTCC TTCAGTCCCT 180
 15 TAAAACGTTG ATACGATTGG WTAGGTGCAA CATTITCAAG TGTGTCACTT GCGCGTTCTT 240
 GCGTTGATGA TGCATATAAA TCGAAGTTTA TCCCCTTAGT TTCATAATAA CTACGTGCCT 300
 TTnGAGCTTG AGCAATTCCA AGT 323

20 (2) INFORMATION FOR SEQ ID NO: 1004:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 320 base pairs
 (B) TYPE: nucleic acid
 25 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1004:

30 TTCTAACTTG ACGTGACTGG GCATTCTGT GnAAATnTTC TGACATTCTT TTTAATATCC 60
 GCAACGCAAT TGCTTCAGTT AAAGATTGnA ACTTGCAACA TTATTGGTA CGAAAAAGTC 120
 35 AGTTTAAATG TCGATATAAG ATTTATTTTT TTTGTTATAT AGTTTCGCAA CTACATTGG 180
 TTGTCTTACT TGATCATATT TTGCAACCGT ATCGAATGCC GTCTTTTCAA ACAGCTTTAC 240
 GAGATACGTA AACCATGACC CATCCATCGA AGTCCTTGGT AAAAACCAG GGTTCGGAA 300
 40 GCCGTAGGGT TTGAAAGATA 320

(2) INFORMATION FOR SEQ ID NO: 1005:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 305 base pairs
 45 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1005:

nATTAATGCT AGCCAAAACA GAnTTGCAAn ATGTAAAGAC ATGTGAAACC CTCCTTATAT 60

55

CGATATTTAT AAAAAATAAT ATTTCACCTA ACCAGTTTTT AGTTATCATT GCAATGGTAA 180
 AGGATACGAT GAGTATCACA CCACAAATGA TAATACCAGG CAGGAGCCAA CATAAATCAT 240
 5 CTAAATCTTT ATTATATGTG ATTAAAATAT TAAAGATAAC AAAAGTGGTA GTAATAACTA 300
 TATTG 305

(2) INFORMATION FOR SEQ ID NO: 1006:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1006:

20 TTCAAGATAT CAGTATAAAT AAAAAGCTAA TATGCTCATT ATAGACAGCT ATAAGTATAT 60
 TTTCTCGTCC CACTCTATAG AAATCAATTT CATTATTAC CATTTTCTCT ATTTAAAAAC 120
 ATATTTTGGG TATTACAAT TAAAGTGGG TATATATATT TAATGAACCA ATTTTTTAGG 180
 25 AAAGTAGGGC TAAACCTATG GAAATAAAT TATACCACAT GGTGTCCTCT TTTACCATGA 240
 ACACAGTGAA TTAATAAATA TTAACAAGG TATTGGGGAA GTACACCAG CATTAGGTCC 300
 AATTGGTAGC CACCTTCCAA TCCATTGGGG GAA 334

(2) INFORMATION FOR SEQ ID NO: 1007:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 565 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1007:

40 AGAAAATTTG TTATATTAGA AGCGAATAAT TTTAAACAT ATTATGAAAT GTAAGAAGAA 60
 ATATTATGAA ACTAGGAAAA GTAGATTGTT GAAAATTCCA TACAATAGGn GAnGTAAAGT 120
 45 GAATAAATTC TGGTATTACT AAAGCTATTG ATTGTCCTAA TTGTAATAAA AAGTTGGATA 180
 GTGTAGTTGA GGGGAGAAAA ACTAAATGC AAAAATATAT TCTCAATGGA TCATTATAAA 240
 TACCAATTAG aTTAAAGTAT TGCGaACATT TACAATTAGa AATCAGTATT AATCTGCCAT 300
 50 AGATAATTGT ATTAATGTAA AAmATAAAAT AGAATGAGAA TATACGGAAA TTTTTTATAC 360
 ATTTATAACC AATTCTGTTA AACTGTGAAG AGTAGAGTTA AAAACGAAGT TTTTGTATTAT 420

AATGATTGAA CGCTATTCTA GAGAAGAAAT GTCTAATATT TGGACTGATC AAAATCGCTA 540
TGAAGCCATG GTTAGAAGTG GAAAT 565

(2) INFORMATION FOR SEQ ID NO: 1008:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1008:

CAACATTAGC GTCTAAACAA ATCTTTGACT AAACGTTTAC TTGAGCGACC ATCTTGATAT 60
TTAAAATGTT TATCTAAGAA TGGCACAACCT TTTTCAACCT CATAATCTTC ATTGTCCAAA 120
GCATCCATTA ATGCATCAAA GGACTGTACA ATTTTACCTG GAACAAATGA TTCAAATGGT 180
TCATAGAAAT CACGCGTCGT AATGTAATCT TCTAAGTCAA ATGCATAGAA AATCATCGGC 240
TTTTTAAATA CTGCATATTC ATATATTAA GATGAATAAT CACTAATCAA CAAGTCTGTA 300
ACAAAGAGAA TATCGTTAAC TTCACGATGA TCTGACACAT CGATAAAGTA TyGTsTATGT 360
TCACGTGAAA TyyAAGTCy ATTtTTTACG AaCGGATGCA 400

(2) INFORMATION FOR SEQ ID NO: 1009:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 454 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1009:

TATTGTAAAA ACTGTGGTTC TTACAATGGC GAAGAAGTAG CAGCTAAATA ATTTTAGTTA 60
CTCAATATAA AAaGTCCCGC TAAAATGAT TGTTTTAAGT GGGACTTTTT ATATTGCGAA 120
AAATAATTGG cGAACGAGGT AACTGGATAC CTCATCCGCC AATTAAAATT TGTTAATTTA 180
ATAATTAAAT ATAAAGACGA TTTATTAGTT TTTACGTTTT CTAGGTAATA CGAATGCAAC 240
GATGCTACTT AAAGCTAATA ATGCCATTAA TGGTAATGTC ATATCTnTAT TTGATTCTTC 300
ACCAGTTTGT GGTAATGATT TTGCTTTATT TTCTTGtGTA TTTGTATTGT TTTGGCTTTG 360
GAGTGTGTCC ATCATTGTG TTTTAAATGT TTGCTTnTnG TAATGGAGCA CTAATCTTTT 420
GCCTCGCTAG AACCTGCCGG AGGTTTGGAA CCAC 454

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1010:

10	GGTACAACAA CTTTAGACAA TGAAATATTA AAAGATACGG ATGATAAAAA GTCGAGTAAA	60
	ACTTTTGTG GCGGAACAAA AGTTGATGAC CAACATGCTA GTATCGGAAT GGATTTTGAA	120
	AATCAGGACA AAACTTTAAC TGCCAAAAAA TCATATTTCA TATTAAACGA TAAAATTGTC	180
15	TTCTTAGGAA CTGGCATTAA AAGTACTGAT TCATCAAAGG ATCCCAGTTA CCAACCGATG	240
	AAAATCCGCA AGCCGATGGG GAATACGGTA TTTCCGGCC GTTAACCAAC CACCCATTCC	300
	GGTTATCCGG GAAACCATTG CATCCTTTTA GGAGnCCCG GTnCCnAAAA GGACCTCGGG	360
20	TATCCTTTTT TTAACCAACC CGAAATTACT GGTAAAAAAG	400

(2) INFORMATION FOR SEQ ID NO: 1011:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1011:

	TTAGGTATTC GCAAAAATGA TCTTCAATAT ATAGCTATGG CCAAAGATG GGCTAAAGCT	60
35	TATACAATTA CTGTAGCAGT GGGAGTTGTT ACAGGTACAA TTATAGGACT TCAATTATCA	120
	TGATTTGGCC TACATTTATG GAAATGGGTG GACACGTATT GCACTTCCCT TATTATGGGA	180
	ACATTGCCGT CTCTTGGAGC TATTCTTAA GTATATATTA TATACTGGGA TCGTTTAAAA	240
40	TAATGGCACA TTCTTAATAG TATACCAGTA ATTATGGGGC CTTCTCAGCA TCTCATACTC	300
	AGGAATCATT ATGAATACGC CTGCAGGTTT GAGTGAAGAT GGAAGTGGCC ATGTCACChT	360
	AGAGCGTGTT ACCCACGTTA AGTCGTCATT nCGAATACAC	400

(2) INFORMATION FOR SEQ ID NO: 1012:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1012:

CTTTATGGGA TACTACTACAA ATCGAGACTA TAAGGTTTTT TATTTTATTT ATTATTACAT 60
 5 TATCAATAGT TTTATAATCG AGCTTCAAAA CTTTAGAAAA TAGTAGAAAT AGCATTCAAT 120
 ATAGTGCAAA AGTGCAAATT GATAACTTGA CACTTATCTC CTATAAACCG TACAATTAAT 180
 TTGTATGATT TATATATAAT TTCATAAAGT CATATTGAAT TTCATATAAA GAGCAAACCC 240
 10 TAGAAAAaGA GGTGTTGTGG AATTATTAAG CTCCTACTCA TTTGCGGGGT CATCTAGGGT 300
 GTGGAGGATG TGTGCCGAAT TGTGCTCAAA nATCCCAGCA GCAACGCGAG TTGAACAGCC 360
 TAAGACGCAA CAAAGGATCT GnnAAGGACC ATCAGGCACG 400

(2) INFORMATION FOR SEQ ID NO: 1013:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1013:

GTCGTTGCTG ATACCACGCC AGTATTGGTT TTAATGATA AAAAAATCTG TGAGATTGCA 60
 TCATTGAGAC AAACATCGCT ATTTGAAATG GCCGAATATA TAGGGTTTAG CGAGCCACAG 120
 30 AAATTAGTAC AATTATTTAT TAACCATGAT AGGAAGGTGA GACGCCAATG AATCAATATA 180
 ATACTATAGG TTTTCACCCG GGAAATAGTC GTATTCATCA ATTAAATGCG ACTGTAAAC 240
 TTTTATnCTT ATTAGTTGTT CTATTCTGCA ATGGTnCTAT GCACAGGTAT TnATTTAATT 300
 35 AGGCTCACAT TTATGGGCAA TTCTCAATGA TGAACAGTCG TTGTGTAATC TCG 353

(2) INFORMATION FOR SEQ ID NO: 1014:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 627 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1014:

CAAAGCCTTC AACAAATAAT CTTTATTAG TACTGATTGG TTGCACAACA TAAGTTACAC 60
 CAGGTTTCATC TTAAATGTA ACTTCCTTAT AGAAGAGACC TTTTTTAGCA CTATACTCTG 120
 50 TTTTTTCTGA TTTAATTTTA TCTTTTAGAT TTTTCTCTTC CAAGTAACTG TCAATTAGTT 180

ATGAAATAAA TAATATAATG ATAACTTTAA TCGCGTTTTc TTTCTTCTTC ATTATGTAAC 300
 TCCTTTTTGC TTATCTATTC AGTATGAACG AATCAATTTA TTTAATAAAG AGTTTTTACC 360
 5 AGATTGTAAC AAATTTTTTT ATTCTCAATA TTATTATAGA AATCGAATTA CATACACGAT 420
 GCTTTTAAAA AATTTAATAA CAAATTTTAT TTTACTATCT ATCAAAATAA TTGACTACTT 480
 TTAACAATTA AGGATGATAC AATTACATTT TTTTCAATTT AAAAAATCAG TCATATCAGT 540
 10 AATTACCGAT GAAATACTA AGATATCGAT ATATTTTGCA TTATTTAACA TTTAAATTCh 600
 ATTATAGACA ATTCAATAAT TGCGATG 627

(2) INFORMATION FOR SEQ ID NO: 1015:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 462 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1015:

TAGTGTGACA TTAACACTGG AACAAAAAGA AGCTGCAATT GCAGAAGTTA ATAAGCTTAA 60
 25 ACAACAAGCA ATTGATCATG TTAACAATGC ACCTGATGTT CATTGAGTTG AAGAAATTCA 120
 ACAACAAGAA CAAGCGCATA TTGAACAATT TAATCCAGAA CAATTTACGA TTGAACAAGC 180
 30 AAAATCAAAT GCAATTAAAT CGATTGAAGA TGCAATTCAA CATATGATTG ATGAAATCAA 240
 AGCTCGTACT GATCTAACAG ATAAAGAGAA GCAAGAAGCT ATTGCTAAGT TAAATCAATT 300
 AAAAGAACAA GCAATTCAAG CGATTCAACG TGCGCAAAGC ATCGATGAAA TAAGTGAGCA 360
 35 ATTGGAACAA TTTAAAGCTC AAATGAAAGC AGCTAATCCA ACAGCAAAG AACTAGCTAA 420
 ACGCAAGCAA GAAGCTATTA GTAGAATTAA AGACTTTTCA AA 462

(2) INFORMATION FOR SEQ ID NO: 1016:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 235 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1016:

TGATTGGTCC CATCGACTCG TTATAACAAA TTGAAGGTAC AAAAGTATCT TGTGATTTAA 60
 50 TAAATTCAAG TAAATTCGTA CCTGGTTCTA CAAGGTAATT CTTTCCATC AAGTGTAACC 120

ATAAATTGCG CATATCCACC nAAAATAACG ATGCCCCACA CATCTTTCAG ATAGG

235

(2) INFORMATION FOR SEQ ID NO: 1017:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 227 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1017:

GTTGAAACT ATAAGATCA	ATAAAGGTAA AACAGTGGT	TGTGTCATTA GTGGTGGTAA	60
TAATGATATT AATCGAATGA	AAGAAATTGA AGAACGTTCA	TTACTATACG AGGAAATGAA	120
GCATTACTTT ATCTTAAATT	TCCCTCAACG TCCAGGTGCA	TTGAGAGAAT TTGTAAATGA	180
CGTATTAGGA CCTCAAGACG	ATATTACTAA ATTTGAATAC	TTAAAT	227

(2) INFORMATION FOR SEQ ID NO: 1018:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 284 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1018:

GTCTTACTTG CACAAGGTAT	TATTTCTATC TTACTCGTTG	CTTTCGCAAT CATGCTATAT	60
ATCATTAAATA TTTTAGATGC	ATATCGTAAT GCTGAACGAT	TTAATCGCAA TGAGGAAATA	120
AAGGATCCGA AGCGCGTATG	GTGGCACATG GGACAAGACG	TTCCCATACT TACTAATCTC	180
ACCAGGTACA TnCTTATTGA	TATTGTAGTG TAATTCCATT	ATATTATGTT GGAGTAGCAT	240
TACAATACAA TTATACACGC	GCCTCGAGAC nACATAGATG	GGTG	284

(2) INFORMATION FOR SEQ ID NO: 1019:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 779 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1019:

CAATCATCAC ACATAAATGT	TCGAATAGGA TTGTTTTTAA	GTCGTTTAGA CTCAGTTGTG	60
-----------------------	-----------------------	-----------------------	----

EP 0 786 519 A2

	CACCTCAATA TGAGTTACAT GGTGATTTCG ATATGAATAA CCATCTTCTT GATTGTAAAT	180
	AAAACATCT ACACCATTAT CGCTGTAAAG TCGTTTACCG TCTTTTGCAA ATTGGAAAAA	240
5	TAAATAGGGT AATAGATCTA TCGGTATATC TAAATGATCA TGCTCATTG ATAATCGAAT	300
	AGTAGTTGCA GAGTCATGTG GTTCGGAATG TTTGAAAAAT GGTGTCATAT TAATGACAAA	360
	TGAACCTTCT AACATGGCAC GTTTTTTATA TTTTATTTCT GAATTIAAAG TAGGCGGATT	420
10	AGTTTGTCCt TctAGGATAG CaCGATTCCa TTCaTgaTTA TCTTCAAAGT CGATTGGTTT	480
	TGAACCATCa AATACACCTT TTTCTAAATC TTCGATGCTA ACTTTTCTAT CATCGAAAAT	540
	CCAAGTCGTA CTATCTAATG TTATAGGAAA CTTTACGGCT CCTTTAATTT GTATCATTTT	600
15	CCCCTCCCT ATCAATGTAT ATAGCATTAT TTTAACACAA ATTGCTAACG ACACATTTTA	660
	AATCTACTTG CTTTTTAATA TTTAGTAAGA TAAACTTTTA GTAAGACTTG AGAATTTATA	720
20	TAGAGGGGGA GCGTGTATG GCGAAACAAG CAACAATGAA AAATGCAGCT TTGAAACAA	779

(2) INFORMATION FOR SEQ ID NO: 1020:

(i) SEQUENCE CHARACTERISTICS:

25	(A) LENGTH: 950 base pairs
	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: double
	(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1020:

30	TTAATGGTCC ATTAAGAATA ATGGCAGAAA ACCGTTTGCA TAAATCAAAC CTTGATTCAC	60
	TAACCTAAGT AATACTCGCT TTTCTAAAT CCTTTAGAAA GGAACATAT ATCATGATTA	120
35	CTTCATTCAG ACATTCTGAA GATATAGATA AACATATTAT AAAAACACCA TTAGATCATA	180
	CAGCGTCATG GATTAATGTA GTAGANCCAG ACCGAGAAGA AATTGAAAAT CTTATGGAAC	240
40	AATATAATAT ACCTGAAGAC TTTATACGTG ACCCTTTGGA CTCAGAAGAA AGTCCCGTA	300
	TTGAATATGA CGAAGATACT GGTACTCAT TAATCATTAT TGATTACCT ATCGTCAATT	360
	CAACTAATCG TAGCGTTCTA TCTTTTGTA CGATTCCATT AGGCATTATT ATTGGCAACG	420
45	GTATTATCGT AACAGTTTGT GACGCTGAAA ATGAATTTTT AGAAAATTTA CCTAAGCGTG	480
	ATATTAATTT AAAATTTTAC AGCAGATTTG CATTAGAAAT TTAACTACT ATTGCCGACC	540
	ATTATAATCG TAACTTACGA TTACTTAATA AAAGTAGAAT TCGTATTGAG AAAGAACATA	600
50	AAAATAACAT TACTAACAAA CAACTTTTCA AATTAATGGA AGTTGAAAAA AGTTTAGTAT	660
	ACTTTTTAGC TGCCTtAAAA GGTAACGATA CAATTATTAA AAAGTTATTC CGTTTACCTG	720

AAGCCATCGA AACACAGAA TTACATCAAC GTATCTTAGA AAGTATCACA ACATCATACG 840
 CTTCTTATT ATCTAATGAT ATGAATACGA TTATGAAGAC ATTAACACTT TTCACGGTAC 900
 5 TATTAACgTT ACCAAYActC GTATTTAGTT TCTTCGGTAT GAATGTGTCG 950

(2) INFORMATION FOR SEQ ID NO: 1021:

- (i) SEQUENCE CHARACTERISTICS:
 10 (A) LENGTH: 528 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1021:

AATATATAAA ATGAATACAT TGTGAGGCAA TTATCAAATG AAATTTAATA AAGTAAAACT 60
 20 AGTTATACAT GCGTGTGTAC TATTATTTAT CATTATTTCT ATAGCGTTAA TTTTTCATCG 120
 ATTACAGACG AAGACACATT CTATAGACCC AATACATAAG GAAACAAAAT TATCAGACAA 180
 TGAAAAATAT TTAGTGGATC GTAATAAGGA AAAGGTTGCG CCGTCTAAAC TAAAAGAGGT 240
 25 ATATAATAGC AAGGATCCTA AATATAAGAA AATTGACAAG TATTTACAAA GTTCATTATT 300
 TAACGGTTCA GTAGCTATAT ATGAAAATGG CAAATTGAAA aTGAGTAAaG GTtATGGaTA 360
 TCAAGaTTTT GAAAAAGGTa TAAAAaCAC ACCGAaTACG aTGTTTTtAA TnGGTTcAGC 420
 30 TCAAAAATTT TCAACAGGGT TACTGTtAAA ACAGTTAGAA GAAGAACATA AAATAAATAT 480
 CAATGATCCA GTAAGTAAAT ACCTTCCATG GTTTAAAACA TCTAAGCC 528

(2) INFORMATION FOR SEQ ID NO: 1022:

- (i) SEQUENCE CHARACTERISTICS:
 35 (A) LENGTH: 713 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1022:

GCATTnCGGT TAAAgTAKgT TTCAGCTTCT CTCaTTTtAG AAGTACCGaA AAeTGGTTGG 60
 45 TTAtCTGGAT TTAATrTcAC GATAAATATT GCTTACTTTG TTACTTTGTr AAATGTACCC 120
 ATTACGAGTC TCAATGTTAT TCCAATAAAT ATCACTTGTT GGTGCATGGT TTGGATATGC 180
 50 ACAATGATTT CTTGAAATTG TTTGAACGAT TTCTAATGGA TCACAGCCAA ATGTACTGTT 240
 TAATACTTCA GAGTCTCTGA ATAATGCACA AAnTGAAATA CAAGTTGTCC AGTTTGGTAA 300

AGTATCTTGC GTATAACCAG CCTCTATACG AACCATTTTA AATTTTGTTC GAATTAAATC 420
 TGTAAGAACTC TGTCTATCCA TTCTGTTATC TACCTTTCTG TTTGGGGAAT TTTATCCGGA 480
 5 CACAAGAAAT TGCAATAATA CACATTTCTT GAAACACAGA TTACATCTTA ATATATTTT 540
 AATAAAATGA AAAGAGTCAA TTTCACATTT GTATTAAATT TTGATCAAGT CAACAAGAGT 600
 TAAGTTTACT TTATAATGAA GCGAAAGTAA ATGAAGTAAA ATTTTATGCA TAATCACTAG 660
 10 ATTTGATAAA ACTTACACTT TTATAATGAT ATCAAATTTA CAAAGGAAAA CTG 713

(2) INFORMATION FOR SEQ ID NO: 1023:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 570 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1023:

AATAAAATAG AAATGATTAT GGGTACAATT ATCGCTATCA TATCCTTGTT ATTAATTATA 60
 25 TTACAAGCAT TTAATATTAC TTGGGGCGTT ATACCAATTA CAAATTTTGG ACATCAATTT 120
 TTCTTTTTCA TTGGTATTAT TTTAGTAATT GCCGGCATAT TTTwyAAGCG ACTtGAGTTT 180
 TCGGGaATcG GGTtATTATT TTGTcaaaaa ACCGTCGATG CAATGATTCA TAATCCACAA 240
 30 TCAGCCCAGA TTTTTTCATT AATTATATGG ATATTATTAG TAGTTCTAGT TATATATTTT 300
 ACAATTAGAT TATCTTCACG TACAAGATTA TAAATATGAT AAAACTATTC ACTTGaTTAA 360
 TTGTATTAAT TGaGATGaAT AGTTTTTTTA TTGTTGGAAT AACTTTTGGT AATTTATAAA 420
 35 TAATTTAAAA AAATTGTTTA TAAAagGAAG CGTATATAGA ATGAAGGTTG GGTATATAGT 480
 TTATTGAGGG AGGTGTCACA ATGAATAAAG TCACAaTTAA TCCTCAAATC CAATTAACCT 540
 40 ATCAAATTGA AGGTAAAGGG GATCCTATAn 570

(2) INFORMATION FOR SEQ ID NO: 1024:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 487 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1024:

CTTTGTTGTG CTTGAGCATT ATTAAAAAGA GTATTAAAT TTAGTTGTTG GTTTGTAATA 60

TCAGAATTAT TAACACTATA TTTCCCTTTA AATAATGGTG ATTcGrAATA ATGCTTATCT 180
 TTATCTGCAG CTAActGGAA TTKCCCTAAT GCAGAGTCTG CGATTGTTGG TTCAAGATTa 240
 5 ATCATTGATT TCTCTTTTTT AGGATCATGT CCATATGACA tGTaATTTTC GATGCATTAA 300
 CAACAGATTT AKGAATGCCA AGCCCTTTAA CAATTTcATC TGATGCATCT GCGCTTAATn 360
 CTAATGAAGA TAAAAcGAt TAeCTTTcAT CkKTTCTTGG AACTTCACTT CATTTTTCAAA 420
 10 ACGGTCATTa AAATAATCTT TATACATTTT TGCTGTTTGT TGTTCACTTT TTAGGTATGT 480
 ATTTTTc 487

(2) INFORMATION FOR SEQ ID NO: 1025:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 364 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1025:

25 ATATGTTATA AACAAATTTTA CAGTTGTATC ATCTACTCGT TCTATTCTCA TATCATCTCA 60
 CTCCTTACAG TCGATGAATA GATCCACAT TGTATTAAAG CATCAAACAA AATACAATTT 120
 ATTTGTTTGA TTTCTTTCTC TAAAmTATTT TGGTAACTTA TAATAACATA TTCGTTGTAG 180
 30 CAAAACTATT TAAATGATTT ATACAGTTAA AGCATTAAAG CACTTTCTTA ATTTAATTTT 240
 ACCTTATCAT AGCAAATGTT TCATCCAAAA CACTCTAATA TAGAGCTATA TTAACAATTG 300
 35 CACATTTGaT TTAAAAGATA CTAAGCAATT ATTGtAAAAAT TAAAACCAAA AAaGCAACAC 360
 TATA 364

(2) INFORMATION FOR SEQ ID NO: 1026:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 333 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1026:

50 TGCCCCAGGG GAGTAcnAAA AAAAAGnGGG GTGGGGAATT GGAAACCGGA ATTAGTGGTT 60
 AAAGGGGTTT ATTGGATGTT GGGTCTAAAG TATTCCcAGA AATTTATCCA TcNATGATTG 120
 CTTTAGCCAA GTTTTTTTCC AACCCATCTT TATGGAATTT AGTTATCTCA ATTACATTAA 180

CTTATATAAA AATGGCACAA TTATTTTCATG TACCAACAAG AACAATATTA ATACGTCATT 300
 TAACACCTAA AATTATACCG GCTATTATCG TTG 333

(2) INFORMATION FOR SEQ ID NO: 1027:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 450 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1027:

TGTTCCATTG GTTTTAATAA TGGTGATACT GTACCAGTAT CGAGTGCTAA TTCAGTTACG 60
 ACTTTCTTGA CGTTTACAGG AGATTCATCC CATAAAATTG TTAAGACAAG AAATTGTGGG 120
 TATGTTAGAT TGTACTTCTT AAAAACTTTG TTAGAGTAGT AGCGATTAACT TTGTCTTTGA 180
 GCATTGTACA AACTAAAGCA TAGCTGTTCT TTAAATTAT GTTGATCAGA CATTAAAGTT 240
 CTCCTCCAGA CATACTATCC GTTTTTnTCT CTTTTCGGAT TGGTAATCAT TAAAAAGTTG 300
 ATTGTTTATT AATTCACAAC TTTCTTTGAT TCAATGCCAT GCAAAAATTA AAGTATGTTT 360
 AAAGTTTAGA AGATATTTTT GATTAAATCA AGCAAAAAGA TAATTTAATA TATATGTGAT 420
 CATTTTTAAA AATAACTGTh ATAGAAAAGA 450

(2) INFORMATION FOR SEQ ID NO: 1028:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 535 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1028:

TGCATCTATA CCTAGAACTT TAATTTCCGA TTTTATTGCG TCTGTAATAT CTTTAATACC 60
 ACTTTTCGATA GGGAAACTTT CGTCACCTTC AACATATTTA ATACCAAAGC CACCACCAAG 120
 GTTTAATAAT TCAACTTGAA TGCCTTGctC TTTaAGCCAA CGTAAAmCAA TTTTAGCaGT 180
 TTCAATAAAc GCTTCTGTAC CTTCAAtCTG TGaACCaATA TGACAATGTA CACCTTTTAA 240
 TTTTAAGTGT TTAGATTGTT GGACTTTGTC AATTGCTTTT TTAGCTAAGC CATATTGaAT 300
 TGaTAATCCA AACTTACTAT CTTCTTGCCC AGTTTGaATA AATTCgTGTG TATGTGCTTC 360
 aACACCTGGa TTAACCTGTA AtACAACCTTG aACCGTATCA TTAGCATAGC GGTCTATTAA 420

AATTTTCATGT TTCGTTTTAT TGTTACCATG GAAATGGATG CGACTCGGTT CAAAA

535

(2) INFORMATION FOR SEQ ID NO: 1029:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1029:

GAAGATGATT GAATTATGGA ATTTTTTTTCG AGATATGTTA TTTCGGGGAT CAGATTTTGC 60
GATTTTGCCT TGGATAGAGT AGTTGCGATT TGTAATACG TTTTTCAGGT TCGATTCAAT 120
TTCGTTGTTA AGATAATATG GATTAGTTTC ACTGACATGT TGATGCATGT CTTTTTTGTT 180
CTGATAAAGT ATAAAATGTT TACTTAACAT TACTTAGTAT GACACCTGCT AATTCAAACA 240
TTATTTGAGA CATTCTTTTC AAATTAATTA TAAATTTTTC CcATAGACT AGTTTGATAT 300
TTATCTACAT CTCAAAATTC TCATCAACAA TCTGTCACAT CCAACATTTT TACTTnAGT 359

(2) INFORMATION FOR SEQ ID NO: 1030:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1030:

TACATTGGTA AATAATTCTC ATAGTTTATG TCTCGTTGAT TAATCCAATC ATTGTTTTTA 60
TCGGGTAAAA CATTCAAAC TTTCAAATTC ACAATTGATT GATGTTTCAT TAAAGTATCT 120
AATTTTGGCT CTCTAGTTAA ATATTCACCA ATGTCATTAT AATAGATATC GTGATTGTAA 180
CTTCCATCTT TAACTAAAT AGATATAGCT ATCGGTGCTC TACTTCCTGA TCCAAATATT 240
TTTCCACCTT CTTTTCTTGA TTTTTCACCC TGTGTTTCGTT GGTCGCCTCT CAAATTAATT 300
ATGtACAGaT AGTTAAATTC ATCGaTAAAA CTTTTCTAAA T 341

(2) INFORMATION FOR SEQ ID NO: 1031:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1031:

GTCTAAC TTT AATGTTT AAA AACTTAGAA ATTTTCTACT CATAAATGGA TGCTTTATGG 60
 5 AATATTATTA ACAGGCC CAG CITCAATGCT AGCTATAGAA TTTGGATGGT TCTTAACAGA 120
 GATGGGTAGA CAGCCTTGGA TTGTTCTGG TTATATGCGC GTGGCAGAAG CAGCAACACA 180
 GCAGCGGAAT AACCTTCGTT ACAATTTTAT TTGGCATATG TACATCATTT AAGTATACAG 240
 10 TGCAACGTAT ATCGTAGTTA AAATAACCGC GTAGAGAGTA ACGTAGCAGA GCAGAGGAAT 300
 GAAAnATTAG CTTATGnAAC GGTAGG 326

(2) INFORMATION FOR SEQ ID NO: 1032:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 263 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1032:

25 ACAATCAGGC TTGTGAAGAA TGAATTGCAT GACGTTTGTG TAATTGAACT GCGAGGTTTA 60
 ATTTCTAAAA TGCTCCAGnC CTCCAATGTA ATCGCATCTT GATATAACAT AGCGATCGCT 120
 TGATTTGTCG TTGTATCAAC ACCTCTAAAC AACGTTTCAC CTATTCGGCA ATTCATTTAT 180
 30 TTTACCCAAA TCATTATATA AAAGTTGTGG TAACATGCTC GAAATACCAC CTGAAATAAT 240
 nTCAATCGAT ATCCTATTTT TCT 263

(2) INFORMATION FOR SEQ ID NO: 1033:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 514 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1033:

45 TTTCTATAGA GGATCCTGTA GAGATGCAAA TTCCTGGTAT CGTCCAAATT AATGTGAATG 60
 ATAAAGCTGG CATAAATAT GTAAATTCGT TTAAAGCTAT TTTAAGATGT GATCCTGATG 120
 TTATTTTAAT AGGTGAAATC AGAGATAAAG ATGTTGCCAA GTGTGTTATA CAGGCTAGTT 180
 50 TAAGTGGTCA CCTTGTCTG ACTACATTGC ATGCAACTGA TTGTAAAGGT GCTATTTTAA 240
 GGCTATTAGA AATGGGCATT TCTGTACAAG AATTGATACA GGCAACTAAC TTAATTATAA 300

EP 0 786 519 A2

AGCAACAACCT CCGATATTTC TTTTCCCaTA ATCATTcATT ACCATCATCA TTTAAGAACT 420
TAGAAGATAA ACTTGATGAT ATGACAAAAG CAGGTGTCAT TTGTGAACT ACAATGCATA 480
5 AATACATTTA AACTACATTC TAAGAAGCGA CAAT 514

(2) INFORMATION FOR SEQ ID NO: 1034:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 598 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1034:

TTTTTCACGA ACATTTTGT TTAATTTT CTTTCTTAA CGTATACTTT CTGGTGTAAC 60
CTCAACAAGT TCATCATCAT TAATGAATTG TAACGCTTCT TCCAATGTGA GAATACGCGG 120
TCTATTCATT GTTTGTGTTT GGTCTTTCGT TGCAGAACGT ACGTTAGTTT GATGTTTTGT 180
TTTAGTGATG TTAACAGTTA AATCATT TTC ACGATTATGT TCACCAACAA TCATACCTTC 240
ATAAACTTCA GTACCAGGT CCATGAAGTT TACACCTCTA TCTTCAAGTC CCAAAATGGc 300
ATAAGTACTT GCAGAACCTT GATCCATTGA AATTAATGCA CCATTACGAC GACCGCCAAT 360
TTGTGCTTTA ATACGTGGTC TAAATTCyTC aAATGTATGG TTAATAATAC CGTAACCTCT 420
TGTCATTGAC ATAAATTCAG TCGTATAACC AATCATACCA CGAGCCGGTA CATTAAAGAT 480
TAAACGTGTA AGTCCATTAT CAGTTGTAGT CaTATCAACC ATTTACCTT TaCGTGcACC 540
TAAKGATTCa ATAACAGCAC CTGcATTTtC TTGTGGCACT TCACATTGCA CACGTTCa 598

(2) INFORMATION FOR SEQ ID NO: 1035:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1035:

AAACAGTGCT TCATTATCGG TATTGATATT GATCCACAAG CCGTTGACCT AGGGCGCACA 60
ATCGTTAACG TCTTAGCACC AAATGAAGAT ATAACAATTA CGGATCAAAA GGTATCTGAA 120
CTTAAAGATA TCAAAGATGT GACGCATATC ATATTGAGCT CGACAATTCC TTAAAGTACC 180
AGCATTTAGA AGGAATTATA TGAATTAAACC AATGAAAATG TCCGTAGTGC CATGCGCCTT 240

AAGTGGGCCA TGT

313

(2) INFORMATION FOR SEQ ID NO: 1036:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 235 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1036:

AATAATGAGT AGGTTTTGAT TACTTACGAG ATAACATGGT GAATTATTCT GAAGATAGAC 60
 TAATGCGTCC ATTACATTTT GCAATCATTG ATGAGGTTGA CTCAATTTTA AATCnACGAG 120
 GnCGACGCCA TTAATTATTT CTGGTGAAGT GAAAAGTCAA CGTCACTTTA TACACAAGCA 180
 AATGTTTTTG CGAAAATGTT AAAACAGGAC GAAGATTATA AATACGATGA AAAAC 235

(2) INFORMATION FOR SEQ ID NO: 1037:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 263 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1037:

nCAATATACC TCCTATCATC ACACAAAATG CGTTGTTTCG TATGATTTTC TCAACATCGT 60
 AGACTAATGC AATCAGACAC AACACCATGC TCTATATCCA ATATTTGCTT TATTGCCTAT 120
 CAATGAGCGT ACTGCGTGCT TTAAATAAT CATCATCAAT TAATGACTGT ACAGGCACCT 180
 CATGAAAATT ATCATCCGCC AAGTATTGCG CACGATCACT ATATGCTAAA TGCATCGCTT 240
 GTATCANATG ATGCAAGTAA TCA 263

(2) INFORMATION FOR SEQ ID NO: 1038:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 218 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1038:

ATTGTACCTG GCACAACTC ATTATGTATT GGATTATCAT CATTACGAGC GCCAAATATT 60

ACCGTTATGA CATGTTGATC ATTTTtagTn AATGTTAAAG CTATAACGTG TGATATTGCG 180
 AGTCTGTCCG CATTCAATAT CTTChAAATG CCCTACAT 218

(2) INFORMATION FOR SEQ ID NO: 1039:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 396 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1039:

GTTTAGACGC TAATGnTGGC ATATATTACT TGCCATGCAA ATGAGTCATA AGGCATAGTT 60
 TTCAAGAAGG GTTCTGACAA TGAAGTGAGC AACATGTCAT GATGAGAAGC AGGACTATAC 120
 AATGAGAATA ACCTTTTtGAT TTTTCATGCA TAAGGCGATT CAATCAAAAG CAATCACCTT 180
 CCAACTGAAT TGTCATTTTG TAAATAAAAA TAATCGATCC AATCGTTATC TAATTCATAA 240
 ATGTGTAAAC ACATACGTTA TGAATGGATA ACGATTTTTT GTTATGTTAA AGTGGTACAT 300
 TAATCATGTA TTTCTGATGA TAATTAACGA CAAGTGAAT GGTAAATGT ATTTTATGGA 360
 TGGAAATGCh ATAATAGGCC TGGGTTACCA TGGnGC 396

(2) INFORMATION FOR SEQ ID NO: 1040:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1040:

AGCATTtTGT TtAAAAGCTG ATGAAGCAAT AATAAACTCT TCATATCCTC TGTCCATTAC 60
 AATTGACCT TGATATACAA TTTCTTTAAA GTTTTCGATT TCTTTAAATT CTCTGCTATC 120
 ATTTAAAATA GGTGCATTtCG TAATAACATT CGCTTCCTTC TTATATCCTT TAGATTGATA 180
 ATATTCTTTT GCTGCATGAC TTA CTGTTAC GAAGGCATTA ACACGATGTT TTACTATGTG 240
 TTTTCTATA CTTTCTACAA ACTTTGAAAT AAGTGGAAct TTATTAAATA AGGCATTTTT 300
 CGCATATATt TCATGCGCAT CATAAACAAT ATTAGCTTTT TtATAATTGC TTAAATAGAC 360
 CATTAATAAT ACGTCGAAAT CATTTGCATG AATCACGTCA 400

(2) INFORMATION FOR SEQ ID NO: 1041:

(A) LENGTH: 268 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1041:

10 ACTTGCCTTT CTATTTAGCT CAGACAGGAA AAATATTCGC TGGAAATATG TAGGAATTTT 60
 ACTTGCAATT CAGCTTATCT TTGCATTTAT CTTGCTTAAA ACTACAATGG GAATCAAGGT 120
 TATTGGTGGT ATTTCAAACG GTTTTAACTA CTTATTATTA AAAGCAGCAG ATGGTGTTAA 180
 15 CTTTGTATTC GGTGGTATTC AATATATCGT CCCTAAGCAC CCACCCATTC CTCCTCCGGG 240
 GAATAATAAC CAACnGAATT AATTCCGn 268

(2) INFORMATION FOR SEQ ID NO: 1042:

20

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 277 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1042:

30 GTGAAGATAA GAAATTAAAG TTAAGACAAG GTTAAAAATA AGCAAAAAAT ATTGAAATTA 60
 CAGATCATTC GANTGGTATT CCAGAGGAAG ATCAAGATTC ATTTTGTATC GCTTTTATCG 120
 ATGGATTAAA TCTCGTTCAA GAAGTCAAGC GGTAATGGAC TCGATTATCT ATTGCTCAAA 180
 35 AAATCATCAA TTAACGGnG ATCGATTAAA ATTAAAGTGA ATTAACAAGG AGCAACGTTA 240
 AATCTATTTT AATCAGACTG AGACGTCATC AAGTCAT 277

(2) INFORMATION FOR SEQ ID NO: 1043:

40

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 379 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1043:

50 TTATCATCAC AAGTGATTTT GAAAATAAAA AAATCGAAGA TGATGACAAT GATTCAAGTA 60
 GTGTGCCGAT ATTGCCGTTT ATTAAACGAG ACAAAGCATA TCAAATTATC CAGAATTAG 120
 TACCAGATT ATCTTATCAA CAAGTTAATG AAGGTATGCC TTTGTCAGn TTCCACAGAC 180

55

AACCATTATT ATTGTTATTA CCGATATAAC CATAGTCATA TGGTTATTGT GATCCAAGGT 300
 ACCTTATGTC AACAGCGGGT TAAAGCAGAG ACAATACATC AGATTCGGCA TGAACGAAAT 360
 5 TATATTTAAn GCTnCTAAG 379

(2) INFORMATION FOR SEQ ID NO: 1044:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1044:

ATATTGAACT TGAAGACCAT GCAGATATAA ATGAAATAAC ATATCGATTA TCAAAAATTT 60
 20 TCGGTATTAA ATCTATTAGT CCAGTATTAA AAGTAGAAAA AACAATAGAG GCAATAAGTG 120
 CAGGGACAAT TAAATTTGCG CCATTnTGAA GAAAACAGCA CATTTAAAT TGATGTGAAG 180
 CGTGCCGATA AAAATTTCCC AATGGATACG TATGAATTAC AGCGTGAATT GGGTGGTGCA 240
 25 GTATTGAAGC ACTTCGACAA TATTTCAAGT aATGTCaAAC GTCCAGATCA TGgAAATTCg 300
 AGTGGGmAGT TtAGGmTTAG ATGCCAATTT TATATGGTAT GnAAGAAGTT GGTTCGGGG 360
 30 TTCCAGGTGG GATTTACChG TTGGGTACTG GTGGGTnAA 399

(2) INFORMATION FOR SEQ ID NO: 1045:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1045:

AnGATAAACA GAGGAGCACA AAAATGAATn nAAATATAAT CATCAAAAGT ATTGCGGCAT 60
 45 TGACGATTTT AACATCAATA ACTGGTGTCTG GCACAACAGT GGTGATGGT ATTCAACAAA 120
 CAGCCAAAGC AGAAAATAGT GTGAAATTAA TTACCAACAC GAATGTTGCA CCATACAGTG 180
 GTGTTACATG GATGGGCGCT GGAACAGGAT TTGTAGTTGG GAATCATACA ATCATTACCA 240
 50 ATAAACATGT TACTTATCAC ATGAAAGTCG GTGATGAAAT CAAAGCACAT CCTAATGGTT 300
 TTTATAATAA CGGTGGTGGA CTTTATAAAG TTACTAAGAT TGTAGATTAT CCTGGTAAAG 360
 AAGATATTGC GGTCTACAA GTTGAAGAAA AATCAACGCA 400

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 626 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1046:

10	ATAAACTTCT ACACCATCAT CTTTACCTAC AACATTGTGA GCTTTAACTT TTAGTCCAAA	60
	GTTATCTTTA AGAATTGTT CACCTACTTT TTCAAATTCT TTACGATGCT TCTTCACAAA	120
15	TTCAATCGCA TCTTTTCTG CAGGTGGTTG AAAGCCTTGT CCTACATATT TTGAAGCTTC	180
	CATTTCCTTCT GGTACTGATT TTGTTTCTGT ATTTGTTTCT GTATTGTGTT CTGTATTGTT	240
	GTCTTTTTTT GATTCAATTAT TCATCGCTGA ACATCCTGAT AACAGTAGCG TTGCTATTAA	300
20	GATTAATTTT GCCTTTTTAA ACATAGCTCA TCACCCATTT ATGTGKTTAT ATAGAATATT	360
	AAAAAGCATT TTAAAAAAA TTTATTCATC TTTACGATAC ACTCCATATT CTATTGGATC	420
	ATTATCATCA TAAAGGCTT TTTAGTATT AATAGTAGGC TTTCTATTT GAATTGTAAT	480
25	TGTAGATTTT TCTGGCTTAT TTTTAAATT ATATAGTTTA TCACTCAGTT CAATTACATC	540
	ATCAACTGTA TTGTCTTTAG TAAATTTTC CTTTGTACTA AACAAATGTTG TTAGTGTATC	600
30	TGTATTAGCA GCGnAATTCA CTTCTT	626

(2) INFORMATION FOR SEQ ID NO: 1047:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1047:

	GACGGCGTTC AAAATGCAAC GGTCAATTTA ACAACAGAGC AAGCTAAAGT TGACTATTAT	60
45	CCTGAAGAAA CAGATGCTGA TAAACTTGTC ACTCGCATT CAAAAATTAGG TATGACGCGT	120
	CTATTAAAGA TAACAATAAA GTCAACGTCA CGCAACTGAA GCGTACAACA TAAATTGATA	180
	GnTATCATAT CAGCAGTATA TCTTACCACT ATAATGTAAT GTTGACACTT TCATATGCAT	240
50	ATACAGACTA TTACGATCAT GTCCATTAT TAGCnCACTG TCATTATATG GTGGCATTAT	300
	GAGGGTATAA ACTTAGn	317

(2) INFORMATION FOR SEQ ID NO: 1048:

(A) LENGTH: 223 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1048:

10 ATACGnATTA TGCAAAAAAT AAAGTGAGAT TGGCATATGT GTAAATCTAA AATACTGTTG 60
 AAAAATATTT TTAGTGAAGT AATCAGAAGT TAAAGATTTA ACTGAAGTAA AAATATAATC 120
 AAGATTACGA GTCATTAACA TTTAGCTTTA AAGAGGGAAA CATATCAAAG TAGGTTAGCT 180
 15 AAGnAAAACA CCGACTAAAT CGGGGATATT TCGTGACATG TTG 223

(2) INFORMATION FOR SEQ ID NO: 1049:

(i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 608 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1049:

AAATATGAAT AATGCAATTG ACCAACGTTT GATAACGTTG CCATACCCAT ATTAAATTTT 60
 30 GTATAACCTT GTTCTTTACT CCAAAGTAAC ATATGCAAGT ATAGACCATC CATTAAATGGT 120
 AAATCTAACT CTGGCAACCA TCTAATTAAA TCGACTGAAA TGGCATCATT AAAGTATGTT 180
 GGCATTAAAC TACAAAATGC AATTACTTCA TTTTCTTCAT TTCGCATTAC ACCAATTGGC 240
 35 GCTTTAGATA AGTATTCTTC ATTAAATnCA CCAACAGAGA AATGCATTTT CyGACGATTA 300
 TCTAGCCaTA AATcACTTAC ATGTTGAAGt TCATTTAtAA ATTcAGTTGr AAACGGtGGt 360
 TCAATAATTT CGAACGAAAT ATTAAGTTCA TCGAATTnAT TTAAAGTCGC TCTAAATCCC 420
 40 ACGGCGTTTT TTACCTGAAG TTGAAAATTG CGTTAAATCA ATAATTGCTT CTTACCTAA 480
 TTTGAAAAT TGGTTACCGG nATTATGATA TAAAGGCATG TGTGATCTG TAACTTGATA 540
 45 GAATATAACA TCATAGCCTA AATACTCAGC GTAATTATAG AATGCTTCTA ACAATTCATC 600
 AAAGGCAT 608

(2) INFORMATION FOR SEQ ID NO: 1050:

(i) SEQUENCE CHARACTERISTICS:

50 (A) LENGTH: 292 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1050:

TGT TTTTCTA CGCTAAACTA TATGATAAAT TGCCTATGTA TTTACTGGTG TTTATGGCCT 60
 5 TTACAGCTGT AATTTTGATT ATGATGTACA TACAAGAGAA AAATGAAAAT TACAAAGTTG 120
 AAAAAAGATA TGTGGTTAGA TATCTCACAC TTAACGTTAT TGTGGGATAT ACTTTGCCAT 180
 TGCTTTTGT ATCTATTAC GTTTTGGTG TAGTCGGTTT TGGATTGAT GTTTTCAATT 240
 10 ATTGTCTAGG TaktATCTTG ATGtyATwTA TTTCTGGTT TAGGTnTATT nt 292

(2) INFORMATION FOR SEQ ID NO: 1051:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 734 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1051:

TAAATChTCA AAGATTTCTT CTAAAACATT ATAATCTTCA ACGATACTCG AATAATAATA 60
 25 CAGCTCATCA TTTCTGGGCT TGGTATAATA AAATATAACT TGCCACCTC CATCGTCCAC 120
 ATATGCAATT ACATATACCT TTTCCCACTC TACTGGTATC ATTTTATTGA TCTCATTTGC 180
 AATTTTATTG TACATTTTAC TTAATTTTTT TCGAAATTC ATGTTATCGC CTCTATTGTT 240
 30 CAGCTTCTTC TTGCTCTTCA ACATATTGCT CGATTTCTTT AACTTTATTA ATTTTATATT 300
 CCGTTTCTGG TAAAATTCCA AATTTTCTAT ACTTATAGTA ATTTTGTGCA CCTACTTGAC 360
 35 CAAATTCTGA ATTTATCCAA TCAATATAAT CAAATGAAAC TTTTAATTCA CCTTCTCTTG 420
 TAAAGTCAAA TTCGCATGAT GTCCATGGTT CATGTCCTTC TTCTTTAAAT AAATTCCTTA 480
 AATTTTGAAA TTGTTTATAC AACTCATACA CTGAATCCAT AAATCCGAT TCCGATATAT 540
 40 CATATTTATT TAATACACTA GTATAGTAGT ATAATTCATT ACTTCCAGGT TCTGTGTAAT 600
 AGTAGAACAC TTCTCCTCCT CCGTCATCTA TATATGCCAT TGCATATACC TTTTCCCACT 660
 CTACCGGTAT CATGCTGCTA ATCTTATTCG CAATCTCGCT ATACATTTCA CTTAATTTTT 720
 45 CTTTGAAAGT CATG 734

(2) INFORMATION FOR SEQ ID NO: 1052:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 775 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1052:

5 ATTTTAAACC AAAATTGCTT TTTTATCTGA AAAGAAAGGC AATGTTAATG TTTCTTCAAC 60
 AATTGGTGCA ATCTCTGTTT CGTATAAATT ATATTTTACA AAGTTAAAGT CATCTCTATC 120
 ACTTTTCAAA AATTGTGATA TGATTCTGTC ACTTTGTTTT TCAACCAATT CAGGCACATc 180
 10 TCCATAAAa GCTACAATAT TGTCGCTCAT TCATTACACC CTTTCATTCTG TTTGACACAT 240
 CAATAGATTA TATCATGTTT CTGTATCTAT AAACCACTTG CATTTCCATA AGAGCTTGAA 300
 TCAACTTTTA AATTATCATC TAAGTCAATT GTAACCTGAC CGTTTTtGTTG ACTATTGTAA 360
 15 ATGCGtACTG CGAATCCTTT GCAATCGTTt aACAACCTCT ATATTAGGaa GwTGATACAT 420
 ATTGTTCTTC CCAGAAGAAA TCAAACTTAT TTTAGGCTTA ATCATCTCTA TAAATTCTTT 480
 AGAACTACTT GTCTTGCTCC CATGATGTCC TACTTTTAAA ATATCAATCT CCGGCAAGTT 540
 20 ATATTTTTTT AGTAGTAAAG ATTCATTATT TTTACTAGCA TCGCCCATTA ATAAAACCTT 600
 TTTATTTTGA TATGTAATCA TAGTAATAAT CGAATACTCA TTTTATCTC GGCTATTTGG 660
 AATAAACTA TCAAAAAAAT AGAAAACCTAC TATCTCCAAG TTTAAACTA CTAACCTGTC 720
 25 TTACATCCAT AAGTTTAATG GTTGTACTTA TGGGCTTAAT TTCCGATAAT AACCA 775

(2) INFORMATION FOR SEQ ID NO: 1053:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 234 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1053:

35 GAGACCAATC ATCATAATGA ACGACAATCA TGTATTTAAT ATTTAATAAA ATACTGAATA 60
 40 ATGCTATAAC TGCCATTAAAT TGAAGACCAA TCGCATCTAA TGCGACAACA CGATCGGCAA 120
 GTGATGGGCC TAGCACAACG CGAATGAGCA TAGCTAACAT AGGAnGTGAC AACTATGATT 180
 AATGCAATAA CGATGAATAA CCTTGATGAn TCATTATAAT TCGCCACCT CTCT 234

(2) INFORMATION FOR SEQ ID NO: 1054:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

CTACTGGTAT CATCCACTGA TTTCATTTGC AATTTCATTG TACATTTGAC TTAGCTTTTC 60
 TTCGAAAGTC ATGTTATCGC CCCTATAGTT CAGCTTCATC TTGCTCTTTA ATATATTGCT 120
 5 CGATTTCTTT AACTTCTTCC ATTTCTGATT CCATTTCTGG TAAAACACCA AACTTTTTAT 180
 ACATATAATA GTTTTCACGG CCTAATTGAT CAAACTCTGT ATTTATCCAA TCAATATAAT 240
 CAAATGAAAC TTTTAATTTA CCTTCGCTTG TAAAGTCAAA TTCACTTGAT GTCCATGGTT 300
 10 CAAGCCCTTC TTCTTTAGAA AGTTTCTCTT AACTTCTTAA ACAATCTATA TAAATCCGTC 360
 CACAAATCAT AAAATACTTT TTCAGAGACA TTATACTCTC 400

(2) INFORMATION FOR SEQ ID NO: 1055:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 333 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1055:

GnGGCATATA TAGCGTTGGC GGTATAACAA AGAAAAATGT GAGATCAGTG TTTGGATTG 60
 TAAGTAATCC AAGTCTACAA GTTAAAAAAG TTGATGCTAA AAATGGCTTT TCGATAAACG 120
 AGTTGTTTTT TATTCAAAG GAAGAAGTAT CATTGAAGGA ACTGnACTTT AAAATAAGAA 180
 30 AACTCTTAAT CGAAAAATAT AGATTGTATA AAGGAACGTC TGATAAAGGT AGAATTGTTA 240
 TCAATATGAA AGACGAAAAG AAGCATGAAA TTGATTTAAG TGAAAAATTA AGTTTTGAAC 300
 GTATGTTTGa TGTAATGGaT AGTAAGCAAA TTA 333

(2) INFORMATION FOR SEQ ID NO: 1056:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 347 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1056:

TGGGCAGTTA CATTTATGAT TATCAGCACA TGTTTAGCTT ATAAATTTTT ACGAAAGTTT 60
 AGCCGTTTAT AAAGCACATG CATAATGAAA CGACTATTTG CCACTTGATT AGTACTTCAT 120
 50 TATTATGTCG AAAATAAAAA TAAGTGGTAT TTTTAATATA TTAAGAAGCA CTCATAATCG 180
 GCTGTTAATT AATAATATTT TTCATAAGTA TTGATTCATC ATTTTCTTTA TGTAAATAT 240

TAATACAGAT ATCAATATGG CnAAAGTGTT nnATGAATCA GAGGTAA

347

(2) INFORMATION FOR SEQ ID NO: 1057:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 312 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1057:

TCCAAAACGG AGAGCCAAGA GTTAACTCTA CTTATATAGG ATACGCGCCA ATTGATGATC 60
 CAAAATTAGC GTTTTCAATT GTATATACAA ATCAGCCTGT ACCACCACCA TGGTTAACAG 120
 GTGGAGACTT AGGTAGAGAT GTAATTAAC TACTACTTTAA GCAGTTAGGT AAAGATGATA 180
 AAAATAAAGA CAAAGACAAA TAAATTTTAA CCTGACGATT GTGTAGCGCA TGGTTGTAAA 240
 ATTTTAACTT TGCmAAATATT ATAGATGTTG GTATAATAAT AAAGTCGTAT TtAGaAATGA 300
 TwAGGaGGGA AT 312

(2) INFORMATION FOR SEQ ID NO: 1058:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 404 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1058:

GCCATTTTGC GATGCTAAAT CCATTGAAAA TGCAATACCT GAAAGTCCAC CAAACAAAGA 60
 ATTGTTATAT TGACCACTCT GTAAATATGG TGCTAATTTT ATGATGTACT TATGCACAAT 120
 TTGCTCAGTA TTAATATCGA AAACTTTTtG AtAAGCATCT AAAAACAAAA TGATACCTGG 180
 TATACCATGT GATAAAGTTG AAGGTTCAAA ATAATCGGTT TCAGTAGATG CTTTTGAAAT 240
 GAAATCATCT ACTTCTGAAA TCTCTTGAAA CTCTTCTTC AATATTAGAT TCATATCAAT 300
 CATTTTTtGTC ACCACACCAA TGCTTTTGAG TTtTAACAAT TTCTTTTACA ATAGATAAAA 360
 CAAATGTTTC TTGATCCTTA TCAATGCCAA ATATTCGATT GnAG 404

(2) INFORMATION FOR SEQ ID NO: 1059:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 233 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1059:

5 ATGTACATAG GnATGACATA AGTGTGCCTT CTTTTCAAG ACCCTCCATA GAAATAATAC 60
 ATGGATGTGC ACCACGnTAC TACCTCTTTA ACGTTACCAG AATTGATAAA TTAACCTTCT 120
 CTTGTGTTGC TAAACCTACA ACTGGTGTAC CTTCTTCGAT TAAGGCAATT GTACCATGTT 180
 10 TAAGTTCTCC ACCAGCAAAA CCTCGCTGAA TGTAGAAATT CTTAAGTTTA AGT 233

(2) INFORMATION FOR SEQ ID NO: 1060:

(i) SEQUENCE CHARACTERISTICS:

15 (A) LENGTH: 295 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1060:

20 GCACCACTAC TGTTAATAAC ACACCTAAAA AAGTCGAAAT ATAAGGGTTA ATCGCTGTTT 60
 TAAATGTATA TCCTAGTGGC ATTGCCATTA ATTATCCGAT AGCTTTTTTCT GCTGCTTCCA 120
 25 TAGTCATCTC ACCTAATGTT GGATGTGCAT GGATTGTTAA TGCGATATCT TCAGCATTCA 180
 TACCAGCTTC AATTGCTAAA CCTAATTCAG AGATAATATC TGATGCACCA GTACCAACTA 240
 30 CTTGAGCACC GATTAAAGTA TCATCTTCTT TAGTGTAATA AGTTTAACAA ATCCG 295

(2) INFORMATION FOR SEQ ID NO: 1061:

(i) SEQUENCE CHARACTERISTICS:

35 (A) LENGTH: 413 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1061:

40 CAATGCCTCT CGTGTGTCAG CTTCTTCCGG TGAAAAACCA ATATTTTCAA GTGCAATAAT 60
 TTGATCTAAG TCCTGCATGA TTACTTTTCT TAATACCATA AAAACACTTC CTTAGCCCTA 120
 45 TATATCAAAA GTAATACCTT CATCTTTATA TTCATTATTT TCAAACCTACC TTCACTATAA 180
 AAAACGAGTC TTTTATTGA AAGCCAATCG CCTTAATCAA TTAGACAAGT TGTATKATAC 240
 50 GAATTAGTAA ATAATCATGA TTATAATTCA TTTTAAGCAT ACTCAAAAAG ACTGGTACAT 300
 GTATACCACT CTAATTCGAA AAAATATATT TAGTTAAAAC CATTTCAAAA ACGACTTCAC 360

(2) INFORMATION FOR SEQ ID NO: 1062:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1062:

AAGCTGCATA CTCTCCAAAC TTAGAACCAC CGAAGCGATT CACAAAATAT TTATTAGCTA	60
AAAAGTCGGC ACATAAAATT AATATTGTGA GCAATGCCAT AGATACATAA AACACCCCATG	120
ATAAATGCTG ATTATGAAAG CCAAATTGAT AGATTAAAAA GCCAACCCAT AATACTAAAA	180
CAGAAGGAAT AATCGGCTTA ATCAACCCAA CAAATGCTAA CATGAAGGCA GCGATGATAA	240
GTAGCCATAA AATAATTGTC ATGTTGATAT CACATCCTCT TTTGTATTTT TTGATTTTAA	300
GTAAAGAATA TAAGTATCAT ACCTAACATG GTTGATGCTG CTGGATACCA AAAnATACAT	360
TTTCCCAAAC CTTACCCAGT GGACTCCTAG GCACCACCTT	400

(2) INFORMATION FOR SEQ ID NO: 1063:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1063:

TGGATCAGAA GGAATCTGGA TGCCTATTGA TGACAAAGGA TACTTTAATT TTGACTTCAA	60
AACGAAACGT TTCGATGATT TAGAGTTAAA GAAAAATGAT GAGATCTCAT TAACATTTCG	120
ACCTGATGAC GAAGATGAGG CATTGAAGTC ATTAATTTTC AAAACTAAGG TAACGAGTTT	180
AGAAGATATT GATAAAGCAG AAACTAAATA TGACCATACT AAAGTGGAAG AAGTAAAAGT	240
ATTGAAAGAT GTTAAAGAAG ATTTACATGT AGATGAAATT TACGGAAGCT TATATCATAC	300
AGAAAAAGGT AAAGGTATTC TTGATAAAGA AGGTACTAAA GTaATTaAG GTAAGACTAA	360
ATTCGCAAT GCAGTTGTGA AGGTAGACTC TGAAGTAGGT	400

(2) INFORMATION FOR SEQ ID NO: 1064:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 434 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1064:

5 GTGGTCGTGA AGCAACTGAT TTCAAAGAAG AAGATATCGA GCTTTTCAAA GACATTGCCG 60
 ACAAAGTAAA ACAAACAAAT AGTTATGATC TAGCGTTTGA TGAATTAGAA AAAGAAAAAG 120
 ACTTCCTGCA AGTCATTGTC AAAAACGATG ACAAAAACCTT ACCTACTAAT CAAAATGTCTG 180
 10 CTCAACTAGT AGAAGATTTA CGCCTAGAAA TCCAGAAAAT GCGCGAAGAA CGTCACCTAC 240
 TTGGTCAAAT GATGAATCAA GTACATCAGC AACAACAAGA ATTAAAAGAA CTTCAAAATC 300
 AACTTACATC TAAAATCGAT TCAAATAGCG AATCCTTAAA AGCCATCCAA ACATCACAAG 360
 15 AGGCTATCCA AGAAGCGCAA GCCTCTCAAG CAAAAGCATT AGCTGAATCC ACCAATAAAG 420
 TTGGAAAGAA TGCT 434

(2) INFORMATION FOR SEQ ID NO: 1065:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1065:

30 TAAACATAT GGCTTGATAT TGCAGAAGAA TTGAAGTTAT CGTACCAGAA ACGGTACATA 60
 ATCATGATTA TATGGAAACG AAAAAAATAA AAATGGGTCA TTTAATATAG GAGGATTTAA 120
 CATTGAATTT TGAAGGTAAn TAATTGGAAA AGATTTGAAG TTGCATCGTT ATTATCGTTT 180
 35 AATGATTTTA TCACTGGAAG ATTACTTGAA GGTGCAAAAG ATACnTTGAT TCGACATGA 239

(2) INFORMATION FOR SEQ ID NO: 1066:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 202 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1066:

AAATATCTAT AGACCTTTAT TCGGAAATGG TTCGTCTCCA GAATGGAAGG ATGAAGTACC 60
 50 GAGTATTGAA AGGTAGAAGG TCTCCAAACT TTACCTGnAC GTGCACGAnA TCTAACTGAA 120
 GATGATTTAG CAATTGAATT GAAACAGCCA ATTGTGCGTT GTAATAACTT AGGAGAGTTA 180

(2) INFORMATION FOR SEQ ID NO: 1067:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 749 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1067:

CTACAATTCG ATCAACGCCG AAGTTAGATA CACCGATTGC TTTAATTTTA CCATTTTCTT	60
TTAACTCTTC TAATGCACGC CATGAGCCAT ATACGTCATT GTAAGGTTGG TGAATAAGCA	120
CTAGATCAAG ATAGTCCAAA TTTAATCGTT GTAATGATCG TTCGATTGAT TTGATAGTAT	180
CTTCATAGTT AACATTTTCA ATCCATACTT TAGTCGTAAT GAATAGTTCA CTTCTATCAA	240
TACCTGAAGC TTCAATACCT TGACCTACTT CAGTTTCATT TAAATAACTT TGTGCTGTAT	300
CAATATGTCT ATAACCCGCT TTAATTGCTT CTTAACCGC TTCTGCGTT TGTCTTGAG	360
GAATTTGAAA TACTCCGAAA CCTAATACTG GTATCTTTAC ATCTTTACTT ATTCAATAT	420
GATTCATAAA ATGAACCTCC TTTATCTTGT ATGTCCACTA TAAACCATGG AGCGAACTCT	480
ATAGCAAGCC ATAGGTTTAC TTTCTCTCCC AAAGACGTC AACATTGTCA TCATAATTAT	540
CACTAGCATT GATTTTAGCA ATATGATTAT CATAATTATC AATTTTATAT TGTAGTAAAT	600
CTCTCGCATC ATGAATTGTC TTTAAGTTTT CATTTAATTC TTCGAGTTGC TTATTTAAAA	660
TTTGCTTTTG CTGTGCTTGA ATATTTTCAT TTTTAGGCAA ATGCGCTAAC CTGCAAAATT	720
CGATAAGCGA TTCAATACTG ACGCCTGCA	749

(2) INFORMATION FOR SEQ ID NO: 1068:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1068:

TCCTCGAGAT AGACAAGAAT GGTGGTACAA TGTTTTTTTAT GACGATGGCA AATATnATAA	60
GAAnATAA11 AAGAATGACA TGTCAAAAAT TAGGCGTAAT TTTTAGATTT ATCTATATAT	120
TTATGCCACC GCTCAAACCT TTATnAAAAG TAAAAAGACA ATATTTATAT TGAACCTGTG	180
ACGTGAATTT CTAAACACA ACCAACAATC CACAAGGAAA CTAGTAAATA AGTTTAAATA	240

TACTGACTAA AAAGATTTTG AAAGTGATTA AGTATTTAAA ACACGCCAAT CTAAACCGC 360
 TATTGACAAA TATGAAGCGG AACCACCGTT GTnTTTCTTT TnCAGGTCCA ATTGAATAAA 420
 5 TGTGATGAA TAGAAT 436

(2) INFORMATION FOR SEQ ID NO: 1069:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 551 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1069:

TTCTCAAGTA ACAGGTATTA TTGTTACTGG TACAATCAAT AGAGAAAAAT ATGGCATTAA 60
 CTTTAACCAA GCACCTGAAA CTGGTGGCGT AATGCTAGGC AAAGATGTTA AATTCGAAGC 120
 ATCAGCTGAA TTCTCAATCT CAGAATAATC TCATTACACA ATCCTCATTG TTTTAATATA 180
 TATACGAAAT GCCAACTATA TCATCCCTAG GTATAGTTGG CATTTTTTCGT TTAACTCATG 240
 25 TGTAACAAGC ACTAAGTGT CACCCTAATT TTAGACGCCT TTCATTCAGG TAGGTCTTAT 300
 TGAAACTGAA AACTTTGATG ACCTTTTGcA AaGCCATTAA CTGTATAAAG CATAGATCCT 360
 CCGCCCATTT CTATATCATT GGAACAAATG ATGAGTTGAT TTGTTCCAGG TATAAATTGC 420
 30 GGATGAGTAG AACGTAACAT ATGCCCTTCA TCTCGGCCTG GTATCAATAT TTGTCCTATT 480
 GGATAACCCC TTTTATTAAA AACTAACACT CGACCTTGA CCATACATTG CTACGGATAA 540
 ATTATCGGCA C 551

(2) INFORMATION FOR SEQ ID NO: 1070:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 325 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1070:

TATnATGGTA ACGCATGAnC CTGTTGCAGC ACGCTATGCA AATCGAGTAG TGATGCTAnA 60
 AGATGGTCAA ATTTTCACTG AATTATACCA AGGGGATGAC GATAAACATA CCTTTTTCAA 120
 50 AGAAATAATA CGTGACAAA GTGTTTTAGG TGGCGTTAAT TATGACCTTT AACGAGATAA 180
 TATTTAAAAA TTTCCGTCAA AATTTATCAC ATTATGCCAT CTATCTTTTT TCGTTAATTA 240

CAGAGTCATA TCCAATTATA CnGGC

325

(2) INFORMATION FOR SEQ ID NO: 1071:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 771 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1071:

15	TAAATGCCGC AATTGGATAG CTTTAATATA ATTAATAGTC AAGGTATTnC CAACAAnAAT	60
	ATATTATCCA CCCGAAGGAA GCGGGGTATn TTTGTTACTG ACGTCCCACA AGAAGCACAn	120
	ATATTAGATA GTGCTTACTC TGAAATTAAA AAATTAAGAG ATTATGATGA AAAACTAATT	180
20	ATCCCAGGAT TTTTGGCGT ATCTCATGAA GGATATATAG TTACATTTCC ACGTGGCGGA	240
	TCAGATATAA CTGGCGCCAT CATATCAAGT GGTGTTAGAG CCACAATTTA TGAAAATTTT	300
	ACCGATGTGT CTGGTATTTA TAAAGCTAAT CCAAATATCA TCAAAGATCC TGAATTAATC	360
25	GAAGAAATCA CTTATCGAGA AATGCGTGAA TTATCTTATG CTGGTTTTAG TGTTTTCCAT	420
	GATGAAGCCT TACAACCACT TTATAAAGAT CGCATCCCTG TGGTGATTAA AAATACGAAC	480
	CGCCCTCAAG ATAAGGGTAC ATTTATAGTG CATGATAGAG AAATAAATGC GAAAAATGTG	540
30	ATTAGCGGTA TAAGTTGTGA TAAAGATTTT ACCGTTATTA ATATCAAAAA GTATTTAATG	600
	AATAGACAAG TCGGCTTTAC TAGAAAGATA TTAGGTGTCT TAGAGGATAA TAATATTTCA	660
35	TTTGATCATA TGCCTTCAGG TATTGATACT ATCAGTATCG TTATGCGTTC AAAACAAATT	720
	CAAAATAAAG AAACAAAAGT ATTAAATGAA ATTCGTCAA AATGTGATGT T	771

(2) INFORMATION FOR SEQ ID NO: 1072:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 237 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1072:

50	CGGTGGATCC GTTTGATCTT GAGTGAGGTG CCAATGAAAG TTATGAGCCA CGTTGTCCCG	60
	CGCACCATAT CGTAGCACCT AGTGATAATA ATAAGGAGGA ATTATAAGTG TTTGATCAAT	120
	TAGATATTGT AGAAGAAAGA TACGAACAGT TAAATGAACT GTTAATGACC CAGATGTTGn	180

(2) INFORMATION FOR SEQ ID NO: 1073:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 733 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1073:

CTTCTGTGA GGGCGTTACA TCACCGGATG GATGATTATG AACTGCGATG ATTGCATTGG 60
 CATTCTCTCT CACCGCAATA CTA AAAATTT CACGTGGATG TACAATCGAA CTATTTAATG 120
 TACCTTTAAA AACACAGGTT TCTTTAATCA CTACATTTTT TGAATTTAAC AATAAAATGA 180
 CAAAATGTTT TTGTGTTAAA TCTTTCATTG TTGGAATCAT ATAATCAGCA ACATCACTTG 240
 GTTGCGTTAT TTkTATACGA TTATTTTCAG CTCTTCTCCC CATCCTTTCC CCTAACTCAA 300

ATGCTGCTTT TAAAGTAATT GCTTTTTGTA ATCCAATCCC TTAACTTTT ATCAAATCGT 360
 TAATTGAAGA TTTTTTCAAT TCATTGAGAT TcGAAGCAGA TTTAAGCAGT TCATTACTAA 420
 TGTCTATGCT CGAGAATCCT TTTCTTCCGG TGTTAATTAA TATAGCTAAT AATTCTGTAT 480
 TCGAAAGACT TTTGCACCA TGGCTTAACA AACGTTCTCT TGGCATTCTT GAAGTTACCA 540
 TTTCTTTAAT TTCAAAAAT ATACGCCCTCC TAAAAATTGA TGGATATCAT TATAAAAAAG 600
 TGAATTGATA AAAAAGGAaA TAAATATAAA TGGAACAAGG GGTAATAGTT TAATCGGCTT 660
 AAATATCATG GTAATTAAAG CAACTAAACC AGCAATGACA AATGTAAATA AnATGACATA 720
 AATAGTGAAT TGG 733

(2) INFORMATION FOR SEQ ID NO: 1074:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 768 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1074:

ATGGTTATTT TTTATGCTCT AAATCGTATG TGTTTATAAG GTTCAATTC TTGCCATTAT 60
 TAATTTTGCC GAGCAGTAAT GGGTTGTAA AGTATCCATC AATTATGCTT AGCAATATTG 120
 AAAAATTTAA ATGAAAAGC GGTTC AATTC TTGAAAATA GTGTATATTT ACATTTTGGT 180
 AATAACTAAC TATAATTTAC ATAAGGAGGT TGTCATTTGG TAGTATTGTT ATCTTATAGT 240

EP 0 786 519 A2

TATTTACATA GAAGATCGAA ATGTGATTAT TGTAATTCGT CACTCAAAG GTATGAATTA 360
 ATGCCGATTA TTAGTTTTTT ATTATTAAAA GGGCGATGTC GAAACTGTCG AAAGCGTATT 420
 5 TCCCTAACAC ATTTCTTAGG GGAAACCTTT GCTTTAATAC CTATCGTCTT TATTAAGTAT 480
 GATTTACAT ACGTAAATGt ACGCTATTTA TAACTACATA TGTTtTTCTG CTTATTTTTA 540
 CTATGACCGA TATCACTTCT TTAATGTTAG ATTGTCGCTT AATTATAATT TATTGTATCG 600
 10 TTTCTCTCTC GTTAAGTATG ATTTATCCAG TAGCTTTTAT CATTATTAGT ATGACCACGC 660
 ATATATTCTA CTTTTTATTT CGGGCATATA TTGGTTATGG TGACGTTTTA CTAATATCTG 720
 15 CACTTCTTT GTTTTTCCCC TCTCCAATTC ACTATTTATG TCATTTTA 768

(2) INFORMATION FOR SEQ ID NO: 1075:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1075:

TCATATTCAT TAAAATACC ATTCATCTCA GCTTTTCTCA TTTTCTCTT ATAAAGTTGT 60
 ATTCGTGTC TTAATTCTGG CTCAGACATC TCACTCAATT TCTTCTGTTT CATCGGCAAT 120
 30 ACCACTTTCT TCTAATTTAG CTTTAATTTT ATCATATTTA TATCCTTTTC TCATAAGGCC 180
 TTCGATAGTT TTTGAAATTA ATTTCTGTTG CGTGTACTTC TTTGATTTT TATTATAAAT 240
 35 TTTTCTAAA TCTCGTTGTA ATAAATCGTC TAAAACCGCT TCATCTTGTTG TAAAATCCAT 300
 TTCATTCAAT ACAGCATGAA TGGTTTCCAT TTCAAACCT TTTTGAATTA AAGATTGCAT 360
 TACTTTTGCn TnAACTnTAT TTTGTGGCCC nTTTTTTGTT 400

(2) INFORMATION FOR SEQ ID NO: 1076:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 753 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1076:

TTAGGTCAAA ATATGTTTTA TCCAAAAGGC ATTTATCTC AATCTGCTGA AGCAAAGAGT 60
 ACAACATATA ATGCAACTAT AGGTATGGCG ACAACAAAG ACGGAAAAAT GTTTGCATCA 120

CAAGGCATCG AAGAATTACG TGATTTATGG CAACAAAAA TGTTCGTGA CAATCCAGAG 240
 CTATCAATCG ACAACATGTC ACTACCAATT GTTACGAATG CATTAAACACA TGGTTTATCT 300
 5 TTAGTTGGCG ATTTATTTGT AAATCAAGGT GACACTATCT TGTACCAGA GCATAATTGG 360
 GGTAATTACA AACTTGTTTT CAATACGAGA AATGGTGCAA ACCTTCAAAC ATATCCTATC 420
 TTTGATAAAG ACGGGCATT TACTACTGAT TCACTGTAG AAGCTTTACA ATCATACAAT 480
 10 AAAGATAAAG TCATTATGAT TTTAAATTAT CCTAATAATC CGACAGGTTA CACACCTACG 540
 CATAAAGAAG TGAATACCAT CGTCGATGCA ATTAAAGCAT TAGCTGATAA AGGTACAAAA 600
 15 GTTAGACTG TTGTGGATGA CGCATACTAT GGTTTATTCT ATGAAGATGT GTATACTCAA 660
 TCATTATTTA CTGCATTATC TAATTTAAAT TCAAATGCAA TATTACCTGT TCGTTTAGAT 720
 GGTGCAACAA AAGAATTTTT CGCATGGGGA TTC 753
 20 (2) INFORMATION FOR SEQ ID NO: 1077:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 405 base pairs
 (B) TYPE: nucleic acid
 25 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1077:

30 AGAAGCGATT TGACaATAAA ACAATTGAAA AACTTTTGGA AAGCAAGTGG TGGGAGAAAA 60
 CGCCTGACAA ACTAAAAGGA TTTTCGGTTG AATATTAAAT TAAAAAGGAT ACTTAATGAT 120
 35 ATGAGAATTT TAAATATTGT ATCGAGTAAT ATTGTTCAAG ACCCAAGGGT ACTTAAACAA 180
 ATAGAAACAA TTAAAGGCGT TACGGATGAT TATAAAATTG TTGGAATGAA TAATTCACAA 240
 TCTACTAATA AGCGATTGGA AAATTTAGAT TGTAATTATC GTTTGTTAGG TAGCAAGGTA 300
 40 GATCCAAAAA ATATTCTTTC TAAATTAATT AAGCGTATAA GATTTGCaAC AGGTGtTATC 360
 CGAGAAATTA AAGCTTATAA AcCTGACGTG AtTCATGCaA ATGAT 405

(2) INFORMATION FOR SEQ ID NO: 1078:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 504 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 50 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1078:

55

CATATTCACA CCTCAATATT CCATAACTTT TACTTTAATA TCAATCCACT TAAATCCATT 120
 CACATCATTG AGTATAAAAT AATATGGTGA TATACGTTGA AGTTGATTAT CTTATATATA 180
 5 AGTATACTTC ACAGAATTTA TAAAAATTGTT TAGTCATCAT CTTCAAGTGTT TAATTCAAAA 240
 ATATAGAATC TACTGTATTG CATmATAaAT TGAAATGCCA CAAATTGTGC TCCAGCGATA 300
 ACCAACATGC TCACAATAAT TATAAACTTA GATTCTACGA CATTAGGmAC CATATATATT 360
 10 CGATAATTTT TTCAATATAT ATAAATGAGC TCAACGCAGT TAATAATAAA CCGAAATGTG 420
 TTTTAGTTTT ACCACCCCAA CGTTTTGTGA CTTTAGGTAA TTTTAATAAC GTGAACATTG 480
 15 CGCCAATTAC TAATAACAAA TAAC 504

(2) INFORMATION FOR SEQ ID NO: 1079:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 645 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1079:

CATTCTTAAT CAACTTCTTC ATAATGGGAA TTTGGCATGG TAnCGAAGTG TATTACATTG 60
 TTTATGGTTT ATACCATGCA GCATTGTTTA TAGGTTATGG CTATTATGAA CGTTGGCGTA 120
 30 AGAmACATCC GCCACGTTGG CAAAATGGTT TCACAACAGC ACTTAGCATT GTGATTACAT 180
 TCCACTTTGT AACATTGGC TTTTAATCT TCTCAGGTAA ACTTATATAA TAAAGGAGAA 240
 35 TTTAATTATG GAATTTAGAG AACAAGTATT AAATTTATTA GCAGAAGTAG CAGAAAATGA 300
 TATTGTAAAA GAAATCCAG ACGTAGAAAT TTTTGAAGAA GGTATTATTG ATTCTTTCCa 360
 AACAGTTGGA TTATTATTAG AGATTCAAAA TAACTTGaT ATCGAAGTAT CTATTATGGa 420
 40 CTTTGaTAGA GATGAGTGGG caACACCAA TAAATCGTT GAAGCATTAG AAGAGTTACG 480
 ATGAAATTAA AACCTTTTTT ACCCATTTTA ATTAGTGGAG CGGTATTCAT TGTCTTTCTA 540
 TTATTACCTG CTAGTTGGTT TACAGGATTA GTAAATGAAA AGACTGTAGA AGATAATAGA 600
 45 ACTTCATTGA CAGATCAAGT ACTAAAAGGC AACTCATTG AAGAT 645

(2) INFORMATION FOR SEQ ID NO: 1080:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1080:

AGATGCCAAA ATCAAAACCA ATAATTTGGC AACAACATAT AAGTCCACTT TACCGGACCT 60
 5 nTAAACTTAT CGTACTGTTA AGAACCAAAC GACTGCCATT ATTTGGTCCT AAAGCCACGA 120
 TGGTGGTAGC CnTTGTAATA ATGCTGGCGT AGAAATTAAC CGCCACCCCT AACACCGAAC 180
 10 TATAACGCGG ATAAACCAAT AAAATTATGA TATAATCATC CGTTAAGTCA ATCCATAGTT 240
 TAACATCCCT TATGTTTAAAT TTACTCT 267

(2) INFORMATION FOR SEQ ID NO: 1081:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 441 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1081:

ATATTTGTCC ACTATTAGAA GATTGTAGAG AAGGACAAAA ACGTTATAAA GCTAGTTTGA 60
 25 AAGAAGCGTG ATAACATGAC AAATATTACA AAAGAGGTAT TTGATAATTT AGAACAAGAG 120
 ATTGATTAT TTGCCAAAA TAAGACATTA GGTCTAGTG AAGCAAAGCC CTAATTGGAT 180
 GAATACCATA GTAAATTAT TGATTATTTT AAGCAGGTTA ATGACATAAC TGGCAATATT 240
 30 GATTTTGATA AATTAAATCA ATATCCTGTT GTGCCAATGA ATTTTAAAGA AAGATATGAT 300
 TATATGATTG AACGTAAATA TCATTTTATG GGCTATCGAC AAATGAAGAC CTTTAAACT 360
 35 GAATTGATTA AAATGnATGC TAGTTATCAA ACAAGGTTAA AGAATAAGCA GGTATnGACA 420
 AGATTGATCA TTTCCTAGTG T 441

(2) INFORMATION FOR SEQ ID NO: 1082:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 410 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1082:

AAAATTTCTT AGtTGATGGT TATTGTGTT GATTTGAATA ATTTGTAGCG AATATTTTGT 60
 50 AACAGGGCTA CTAAGAATTT TTATAACAAG AAGTGATTTC AATCGTACTA ATTTTCAGCG 120
 TTTGATGACA AAAGTGATG TCCAACTTA AATAATGGCG ATAAAATTTA AGTCATGGGT 180

GTTGAATATC AATAAAAGAT TAGCAAGTTA GTTCAAAATG GCTATGTATT GTTTTTTGAA 300
 ATACATAGGT TTGAAATCTA TATTAATTAT GCACCAAATA ATTTAATTAG ACTCTATCGA 360
 5 AAATTTCCAA ATTTTGCTTA CTATCTTCT AATTTTACTT TTATATTGTG 410

(2) INFORMATION FOR SEQ ID NO: 1083:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 586 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1083:

CAGATATTCC CTTCTATTTA CAAGTTGGTA ACCCATATTT ATCAGACAGC GTAGATAATC 60
 20 ATACCGAAAA GTTGTTAGAA CGCTACGAGC AGTTGGTGGA TTTAGTTATG yAAAGTAATG 120
 ATATGAATCA CGTTTATGTG TTACCACAAC TTCATACATT ACTTTGGAGC AATAAAAAAG 180
 GTGTATAAAG GATAACTTAT TTTACTTTTT GCAAGTCATA TCTAATGAAT AACAATATAT 240
 25 TAATTGATAT AATAGTTGAT TGAAGTATAA CGAACAGGAG TCCATCATGA TTGTATATAT 300
 ATTAATTAAT ATTGCTATCG TCGTACTTAT AACTGGATTC AATTTATATA GGCATCAAAT 360
 GCAACATTTA TCATTAAGTG CAATGTTGTT ATCTATTACG ATaAACGCCT TTATAAATAC 420
 30 ATTCATAATT GATAAATATA ACTTTATTAC TCTGTGTACT ATAACGATGT TTATCATTTG 480
 GACGATACTA CAGTTTTACA TTGATAAAAA ATTAAACCT GTATACATTA CAGACCAAAA 540
 35 ATTTATTGCT ATCATATTAA CGATTGTTGT CAGTTTAACG CAACGT 586

(2) INFORMATION FOR SEQ ID NO: 1084:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 638 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1084:

AACACAAGGT AGCGTCATTA GCATTAGAT TTTATTGCCA AATTATATAA CGATTTATAC 60
 ATCAATAAGA AAACAATAGA TGAIGTATCT GCAGTTTCTG AAGTGAAATA TGATATTAAA 120
 50 TCACAAATGA GTGATGATGA GATTAAGCGT TTAGAGGAAC AAGGACTTCA AGCTATTAAA 180
 GAAGGACAAT TTGCAGTACT TTTGATGGCA GGTGGTCAAG GAACAAGACT TGGTTACAAG 240

TTAAAAACAT TGAATCATCA ATCTGGACAT ACGATTCAAT GGTATATTAT GACAAGTGAT 360
 ATCAATCATG AAGAACTTT AGCTTATTTT GAAGCACATA GTTATTTTGG ATATGATCAA 420
 5 GAAGCAATCC ATTTCTTTAA ACAAGATAAT ATTGTGGCGC TTAGTGAAGA AGGGAAGTTA 480
 ATTTTAAATC AACAGGGTCG TATTATGGAA ACGCCGAATG GTAATGGTGG CGTGTTTAAA 540
 TCTTTAGACA AGGCAGGATA CTTAGAAGAA ATGTCTAATA ATGGCGTTAA GTCATATTTT 600
 10 CTTGAATAAT CATCGACAAT GTTTTCAGTA ACATGTTG 638

(2) INFORMATION FOR SEQ ID NO: 1085:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 618 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1085:

ATTGCAATAT TATCCGCTTG GTTCAACACG TCATCTTTat tAaTACcATT TATTGgAAaT 60
 25 tCcACCcATT TCCcGGgCTt CTtACTTCCc TTTATAAAAC TGcCCATTTA ATGAATACTG 120
 TTTAGCTTCA TCTATTCGTA CTTCCACTAG TTTACCAATC ATTTCTTTAG GCGCTTTGAA 180
 ATTAAGTAGC TTATTTTTAT CAGTGTAGCC AGCAAGAACC TGATCATCTT TTTTACTACT 240
 30 TCCTTCACAA AGTACTGTTA CAGTTTGTC TCGTACTTA CTcATAGCTA TTTGTGAATA 300
 ATGACCAACT TTTTATTCA AACGTTGCAA TCGTTCCTTT TTGACATTTA AAGGTACATT 360
 ATCTTTCATT TTAGCAGCAG GCGTACCATC ACGTTGTGAA TACAAGTACG TATATGCATG 420
 35 TTCAAAACCA ACTTCATCAT ACAGAGTTAA AGTTTCTTCA AATTGTTCTT CTGATTCATT 480
 TGGATACCCT ACAATAATAT CTGTAGTTAA TGCTACATTA GGAATTCTAT CTTTGATTCTG 540
 40 TTTTACTAAA TCCAAATAAC TTTCTCGTGT ATATTTTCTA CCCATTATnT TTAATACTGC 600
 ATTATTTCaA GATTGAAC 618

(2) INFORMATION FOR SEQ ID NO: 1086:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1086:

EP 0 786 519 A2

CAGCAATATC ATGATCAGTT TAATTCATCA AGAAAGTCTA TCTATACTTT TACAGAAACA 120
 GTTCAACCAA ATCGTGTTAT TTATGATTTT TATGATTATG ATCCGTATCA ATTAGCAGCA 180
 5 AATAATGCGA AAGCATTAAA GGATCATATT GAACAAAAC TTAAC TTAA AGTCCAAAGT 240
 ACCGGTGTTA KTTACTTTAG TGATGGTACA GTTAATATCA TTCAAGGTTT TGAAGAAAGA 300
 GATAAATATG TTGATACAGT TTCAACAAAA TCTTCGTTAC GACGTATTAT TAGCGAACCA 360
 10 nAGAGCTATC TAAACACCCT TTAAATAAAG AACAGGTTGA nCAAATCACA GCTATATTCA 420
 AGTAAAATCA AAGGCATAAT AATCCATTAC GCTCGATACG CACTATGGTT ATTATGCCTT 480
 TAAATTATTT CTATATATAA nT 502

(2) INFORMATION FOR SEQ ID NO: 1087:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 429 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1087:

TTGCCTGATG GACGATGGCC ATCACAGACT GAGTTTAGAT TGTCTTTAAT GCAACAACTT 60
 GCTGTAAACC AAATTACGAG TGGTAATGAA AGAATAAGTT CAGTTAATGG GCCACCAGGT 120
 30 ACAGGTAAGA CTACTTTTATT AAAAGATATA TTTGCTCATC TAGTAGTTGA mAGAGGTAAA 180
 GAGTTAGCTA AACTAAATAA TCCTAAAGAT GCATTTGTCA ArACAAAAAT TCATGAAACG 240
 GATGATAAAT ACGTATACTT ACTAAAGGAn nTATTGCCAA ATATAAGATG GTAGTCGCAT 300
 35 CTAGTAATAA TGGAGCTGTT GAAAATATAT CTAAAGATTT ACCGAAAATT GAAGAAATTA 360
 TAAGAnATCC CGAAAAATGT AAATTCCTTA AATATGAACA GAATTATGCA AATTTAGCAC 420
 ATGAATTAA 429

(2) INFORMATION FOR SEQ ID NO: 1088:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 611 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1088:

TAAGACCTAA TATTTTGGnC CAATACTATG GTGCAGGTnA TTTATATATG ACACCAACAG 60

ATCCATTATT ACATGAGTTT GGTACGAAAA AGTATCCAGA TGAATATCGA TATGGTTTCT 180
 ATGCTAAGCC AACATTGAAT AGACTTAAACG GGGGATTCTT TGGACAAGTC TTTACTGTTT 240
 5 ACTATAATGA TAAGTATGTA GTTGTACTTG CATTAAATGT AAAAGGAAAC AATGAAGTTC 300
 GAATCAAACA TATTTATAAT GATATTTTAA AACAAAATAA ACCTTACAAT ACGAAGGGTG 360
 TTATTGTTCA ATAATTAATA TAGAAGATAT AACATGTATA TGGCATTAAAG GCATCGACCT 420
 10 TATCTGACCA GTATACGAGT TATATCTTCT TTTTATAGT GGTAAAAAGT TTAAAGTATA 480
 AGGTTGAAGA AGGATGAGTT TAAAAATATG TGTAACTGA TAAAAGGGGA NATCAITTTGG 540
 TGAGTTGGCA TCAGnCTAAA nTGAATGAAG ACGAATACGT TGGTCCATGC GTGGTGTGAN 600
 15 TGTTTTCTAA A 611

(2) INFORMATION FOR SEQ ID NO: 1089:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 644 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1089:

CTGGATAATC GCTTTAATAT GATCAATTG CTTTTCACCTC ATATTAAGCT TATCTAGCCC 60
 30 TTTCAITTTA TTCATACCTG GAATCATTTT CATAATATCA TCCAGTGGTC CTAGATTTTT 120
 CACCyGWTCa AGTTGTTCTA AAAAATCATC TAAAGTAAAC GATGACTCAC GCATCTTTTT 180
 CTCTAAATCT TTTGCTTTTT CTTGATCCAC ATCTTGTTGC GCTTTTTCAA TTAAACTTAA 240
 35 CACATCACCC ATACCTAAAA TACGTGATGC CATACGTTCA GGATGGAATA GCTCTAAACC 300
 ATCTAACTTT TCACTCATAC CAACAAATTT AATTGGTTTT TGTGTCACCG AACGAATAGA 360
 40 TAAAGCTGcA CCACCACGTG tATCACCATC TAATTTAGTT AAGGtAACAC CTGTGACATC 420
 AAGTTGATCG TCAAAAGATT CTGCAACATT GACAGCATCT TGACCCGTCA TTGAATCGAC 480
 AACTAACATA ATTTGTTTTG GTTAGCAAT GTCTTTTACT TCTTTTAATT CGTTCATCAA 540
 45 TGCTTCATCG ATGTGTAATC GACCTGCTGG TATCAATGGA TTACAAAGTC TAAATGTTCT 600
 TCTTTAGCA n GTTTTAATGC ATTAGTTACA ATTTGGTGTG GGCC 644

(2) INFORMATION FOR SEQ ID NO: 1090:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 207 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1090:

5 GATCCTATCG TTTTAGTGCA TGGTTTCAAT GGGTTTACAG ATGATATTAA TCCTTCAGTG 60
 TTAATCATT ATTAGGGCGG TAATAAAATG AACATTCGCC AAGATTTAGA AAAAATGGTT 120
 ACAAAGCTAT GAAGCAAGTA TAAGTGCTTT TGGAAGTAAC TATGACCGCG CATTGAACTT 180
 10 TATTATTATA TCAAAGGCnG TCGnGTA 207

(2) INFORMATION FOR SEQ ID NO: 1091:

(i) SEQUENCE CHARACTERISTICS:

- 15 (A) LENGTH: 212 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1091:

20 GACTCTAGAG GATCCCCGCT CAAATGCCAT TTGGTGATAT TCGTGAAGCT GCTGGCGAAA 60
 AAACATTAA TCCAGTGGAA GATCGTTTTG TAATAAAAAA ATAATCAATA TATTGTTAGG 120
 25 AATGGGACAG AAATGATAAA GATTCATTAG TTATTCATTA TGTGTAGTT CTTACACATT 180
 AGCCGCTGCT AATnGCAACT TAAGAntAGG TT 212

(2) INFORMATION FOR SEQ ID NO: 1092:

(i) SEQUENCE CHARACTERISTICS:

- 30 (A) LENGTH: 208 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 35 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1092:

40 TGGACCTGCA ATTGGTTGCC AGCAGCAACT TTAGCTTCAT AGCTAGCTTT GTGAGCAAGT 60
 GGTAACCTG GAACGATATC ACCAATTGCA TAGATATTGC TGATAGACGT ACGGCTTTGT 120
 TTATCAACnn CTAATAATCC ACGTCAGCGA ATTAAACACC TAATTCTTCT AGGCCTAATT 180
 45 CGTCGTGTTT GGACGACGAC CTACATTA 208

(2) INFORMATION FOR SEQ ID NO: 1093:

(i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 902 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1093:

5	CTTAAAAGTT GTnTCAATAA TGATTGTATT AGTTGCATGC TTATTATATA TGAATCATAG	60
	TATTGATTTA CCTACCCCTTA TTATGATTTC AATTTTTTCA TTTGTGATAT TTGATAGTGT	120
	TGAAAAATATT AATAGTGCTG CACACGTA CT TGAAATGATA GATATGACGA TAGATGATAT	180
10	TGmAAAGATA AAAAATGCTC CAGAACTGGA TGAGAATGGA AAAAATTGGA CGATTAAAAA	240
	TGAAAAATATC GCTTTTCAAA ACGTGAAC TT TCATATGAT GATAACAAG TGATAAAGAA	300
	TGTGAATTTT GAGATACCTA CACAAACATC AACAGCAATA ATTGGACCTT CAGGAAGTGG	360
15	GAAATCTACA TTATGTCACT TACTCTTGCG CTTTTATGAT ATCGATGATG GAAATATTCTG	420
	CATCGATGGT GTTGATATTA AAGATATGAC ATTAAGTACG TTAATGTCGA AAATTAGTGC	480
	AGTATTTCAA AAGGTGTATT TATTTAATGA TACGATTGAA AATAACATAT TGTTTGGCAA	540
20	TCCAGGTGCA ACGAAAGAAG AAATTATTCTG TGCCGCGAAG CAAGCATGTT GCCACGACTT	600
	CATCATGTCA TTACCTGAGG GATATCAAAC AATGCTAAAT GAAAAAGGTA GTAATTTATC	660
	TGGCGGAGAA AAGCAAAGGA TTTCTATTGC TAGGGCGATA TTAAAAGATG CACCAATAAT	720
25	TATTTTAGAT GAAGCAACTG CAAGTATTGA CCCTGAAAAT GAACAGCTGA TTCAAACGGC	780
	AATTAATGAA TTAAGTAAAG GCAAAACAGT AATTACAATT GCACATAAAC TTGAAACTAT	840
	TAAAnATGCA GATCAGATTA TAGTGCTCAA TnAGGTGAA ATAATTCAAA AAGGTAGTCC	900
30	TG	902

(2) INFORMATION FOR SEQ ID NO: 1094:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 632 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1094:

45	ACGCAAGGGA TATGATTAAA CACCATAATA TACAATCACC TTTTTTATAC ATGAAAGCAC	60
	TAATAGAATC GATTCATTTA AACATAAAC ATGATTTTAA CCAGCAAGAT TTGATTGAAA	120
	TACCAATTGT GTATGGTTCG AAATATGGTC CGGATTTAGA ATCACTTTTA AAACATTACA	180
50	AAATCAAGCT AGAACTTTT ATTGAATTAC ATTCTAAGGC GCAATATTTT GTTTCGATGA	240
	TGGGATATTC ACCTGGGTTT CCTTATTTAA CTGGATTAAA TAAGAAATTG TATATTAATC	300

GCGGTATTGT AACTACGGAT ACAATTAATG ATTGGTTAGT TATTGGTTAT ACACCATTAT 420
 CACTTTTTTAA TCCGAAAGAA TCAGATTTTCG CACGCTTAAA GTTAGGCGAT AATATTAAAT 480
 5 TTAGACCTAT CAATGAAAAT GAATTAGAAG TAGGAGCGTT TAAAGATGTC AATCATAATT 540
 GAAAAAAGTG GCTTATTCAG TAGCTTTCAG aCTTTGGCAG AAGGGGATAT GAACATGATG 600
 10 GTGTAATTCC ATGTGGTGCA CTTGATACTT TA 632

(2) INFORMATION FOR SEQ ID NO: 1095:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 212 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1095:

GCAACACGAT TGCTAAAAAA TGATATACTT ATTAATTGTT GCAACACTTG TTTATGTGAT 60
 ATACTGATCA TGGCATTGTG GCGGATTGAT GACCATACAC ATGACGTGAC AATGATAAAT 120
 25 CATTGCCACT ACTTGTTAAA ACAGCAATTT CTCAAGTGGA AGCTGGTGcN ATATATTnCG 180
 CCAATAATAT GATGGATGGT TTGTTGCTGA AA 212

(2) INFORMATION FOR SEQ ID NO: 1096:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 466 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1096:

AATGAAGTGG GTATTnCTTT TGCCATGCTT GCCCACTGCC ATGCATTTCG TGAAGAATGT 60
 TTTTGTAGAA CCGgCTTAAG AATTTGAAGT TTGTAGTAGT ATCTAAAAAG ATTACTTGGT 120
 GATACTCAGG ATGAATTCCT TGTTcATTAT TTTCAGCTCC TTTGCCCTGA ACCATCTGGA 180
 45 ACAGAGTTAT TTGTGAGTTT TTACCCAATA CTGTGTAATT ATAAAGGTAA TTAATTCAAA 240
 ACGCAAGCCC CTATATAATG TTTATTAAAT TATAGGTGGA CCCGTTTTAG TACTTTCTTC 300
 TGCAGACTTT TGTAGCTGCT TGAAGAAATC TtcATTATTC TTAGACCTTT TAAGTTTGCG 360
 50 AATAAATCTT TCAGTAAAGT CAGTTGAGTC AGTGAATAGA TTTCTTAATT GCCATAATGT 420
 GTCTAATTCA GATTACTTA TCAACAATnC TnCTTTACGC GTTGAA 466

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 208 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1097:

10	TTTTGATTCA ATAGGCGGTT CCGTGTATC ACTGACAACT TTAGTTGTAG CTTTCATCTTT	60
	ATGTATTTCT TCGTTAAATC CTTCAAGTTT TTAGTCGTGG GATTTTAACC TCAGGATGTT	120
	CCATCATGTC TTGACTATCA AGTCCTTnTA CACGTGTCTT TATGTGATGC TTGATTGCGT	180
15	nCCCTTACTT TTTGAATAGG GGTAGTAA	208

(2) INFORMATION FOR SEQ ID NO: 1098:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 571 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1098:

	CCTTCAACGA AAATAGCATA TTGACCATAA ATATTATGAA TTGTTTGTTT AACATCTTCA	60
30	GTTATTGGAT CTTGACTCAA AAATACATTA AATACTTCAA TACCAAATTT ACGTGACATT	120
	TCTACAGCTT CATACGTATC AATAATACCA TCTTGACTAT AATTAAATGC AGACGGTTTCG	180
	CCGTCTGAAA ATANGATTAA AAATCGTTGA TGTTGATTTT GACGCATTAA TCGTTCACCTT	240
35	GCAACTCTAA TAGCAACACC ATCAGGATTA TCATCTTGAG GTTCAAGTGC CATAATACGT	300
	GGGCCATCTT TTTCAAAGGT TGAGTAATCA TAGTTAATAA TTTCATTAAT GATATTTGGT	360
40	TGTGCATGCT CGTCTGAATC AAAGGCATCC TCACTGAATG ATAAAATTTT ATGTTTAATG	420
	TTCAATGCTT TTAACGTCTC GTGGAATAAC ACTACACCTT TCTTCGTTTC AGCCATTTTA	480
	TCATGCATAC TTGCTGgACG CATCAATTAA CAATGTAAAT GTnCGCATCA AATGATTnAC	540
45	TTAAATCTTG TTTTGTGTA AACAATTTAT A	571

(2) INFORMATION FOR SEQ ID NO: 1099:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 214 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1099:

TGCAAGTGAA CAAGTCATTA ACTTGTTTAA TACACGTGGG GCACAAGTCG AAGAAGTTTG 60
 5 GGTGAAGGGC CATGAAATTA CAGAACTGG ATTAACGGCT GGTCAACAAA TACTTGGGAA 120
 ATAACAGTTC TATTAAGAAG CGGACAGATG GAAAAGATTT TACCTTTCAT CTGCCGCTTT 180
 10 TTGATTTGAA GGCCGGACCA AATTTACCA GGAA 214

(2) INFORMATION FOR SEQ ID NO: 1100:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1158 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1100:

CACCGTATTG TACAAAGAAT TTAAAGTTTT CGATTCTTn TCTTAATTTA TCATCAGCTA 60
 TCGGTTTGGT TGGGATAATT TTATTATGTT CCATTTTAC TGGATATTCT TTTTCTTTAC 120
 25 TACGTGAGTA TCCTnTTTTA TCTTCCATA ATTCCCTCAC AATAAATTCA CCTTTTGTCG 180
 TTCTGGTATT GCGGTCTACA TACAGGACCA ATCCTCTGGA TTCCaTATTc TTTCCATTG 240
 30 TTTCTATTGT CATTTTAGAG TGAATTATCC aAGTGCCTTT GTCGCCCTTT TCAAACCTCTT 300
 GATCTCGAAA GCCTTCCTTA TCATAAAAGT CTTCAAGATT TTTAGTTGGA TACAGGCTCA 360
 ACGTTTTGTT GAAGTTTTCT TTAATTTGTT TATCTTTACT GCTTTCTTCC TTTTTCATTc 420
 35 CGCAAGCCCC TATAAAAACA GCTAATAATA CTAATACAG CCAGAGCCTC AACCTTTTTG 480
 AGTGAATCAT CATTTACAT CCCCATTTTT ATTTTGATG CAAAGTTAAG TtCAAATTCC 540
 AATATTAATA ATATTAGAGG aAAcTTtATG ATTAAaTCCT CGTGGATTtT AATTGTTAGT 600
 40 TGTATTTTTT ACATATCAAC ATCACAAATT ATTTAAAAG CGCAAATATC TTTATAATTT 660
 TTATTGGCCT AACCAACTAA TTAATTAAGA TAAATTGCGC TTATATTAA AATAATAACA 720
 CTGAACTCA ATGTATTTAC TTATTAAAT TGATGTTTAA ATACAACTTT ACTAACATTc 780
 45 ATTTTTCGGT TTACATTAAT TkGTTAGATA ACGATATATA TCaTCTTIA CAGCTTTATC 840
 CAGTGCTAAA TCCATCGTTA CTACGTTTGA ACCATTGGC ATTTTATCTT GCTTTTCTGA 900
 50 ACCTTCTATA TATCCAGCAG TTCCTAAATA ATAAAAATAT ATACCATCAT CATCTTTTTT 960
 CTGTACAAA ATATACATTT TAATTCCTTT TGCTCTATGG GACAAAATTT TCTGAACCTC 1020
 TTTGATTCT AGCGTCTAT TAGATTTAGT AAACCATTTT AATTCATCTT GACTTAAAAA 1080

TGGCATTCT TGGCTTTT

1158

(2) INFORMATION FOR SEQ ID NO: 1101:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 353 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1101:

CCAAATGCTA TAAATGCAAA AATnGCTAAT GCGATATTTT TATAGAAAAT ATCTGGTCCT	60
AAATTTTGTA AATACGTGGT AAACGTTGCG TATGACAATA AGCCAATCAC TACAGCGTAA	120
ATATGTGAAA TAATTAAACC GAACCGTCTC GCTCTTTCAA AAACAAGTGT TGCTAAAATA	180
ATAATCAGTA ATCCAAATGA CAAGGGTTGT CGCCAACTTA ATGGTAAAAA CTGACCTAGA	240
TAGCATCCTA TGCCAAATAT AATCCAATAA TACATAAAAT AAAGCCACAC TTTACTTACT	300
GATTGAGCAT GCTGGTTTTG ATGATAATAT GAATGATTG TATTTTGCGA CAA	353

(2) INFORMATION FOR SEQ ID NO: 1102:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 194 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1102:

CCCACACGTC TTCCACCGGA TAGGTTTCGA GCTCGGGCGA ACCGGGCAGG GCGGTGACCA	60
CCCCGTGCGG TGTCTTCTTG GCCAGCTTGT TTGCGAGCTT GGCCAGCGTC TTCGTGGGGC	120
CAATGCCAC GCAACACGGG ATGCCACCC ATTGGAGGAT CTGGGCACGG ACCTGGCGGG	180
CCATCGCTTC GnTG	194

(2) INFORMATION FOR SEQ ID NO: 1103:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 220 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1103:

TCGCTTTTGC TTTTGCATCA GGTATTGCTG CTATTTTCAGC ATACTTTTTG ACTTTCAAAT 120
 CTGGTGATCA TGTCATCTTA CCCGATGGAT GTATATGGGC GGTTACTTTT CGTCTCACTG 180
 5 TGGCAAATTT TGGATCGATT TAATATTGAA TTTTACAACC 220

(2) INFORMATION FOR SEQ ID NO: 1104:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 235 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1104:

GGACATTGTA TCGACATTTT AAAGATAAAA GCGATTTATG CTACTACGTC ATACAAAGAG 60
 20 ACCTTGATAT TTTTATCACT CATTTTAAGC AAATTAAAGA TGACTATCAT TCTAATTATG 120
 AGGTTATGCA AGTGTCGTCA TCGCTTTTAA ATAAGTCATA ATAAAAATCA AATAATTCTT 180
 GATAAAATGC GCTTTGGTAA AAACGTAATT TATTGTTGCC TGCTTCAATA CATTG 235

(2) INFORMATION FOR SEQ ID NO: 1105:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1105:

GCGGGGGCAG GTAAATCCAC TTTGACACAT CTTATTGCAG GTGTTTATCA GCCAACAATA 60
 GGTACTATAA GTACAAACCA GCGTGATTTT AATATTGGGA TACTTAGTCC AAGGCCCTAT 120
 40 ATTTCAGGCT CTATAAAGA GGATATTACG ATGTTTAAAG nTATAGAAAA TAATACTAAT 180
 GAAGAAGTGC TAGACGAAGT AGGGTTTATT AGACCAAGTG CCATCCTTC 229

(2) INFORMATION FOR SEQ ID NO: 1106:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 596 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1106:

rAATTAAAAT CAAAATTTGA TGAAGTAAAT GTAATCGCGT CAACAAACGG TAGAAAGTTT 120
 ATTAATGGTG AAATATTTAA GCAATTTTGC GATACTATT ATGACGAATT TGaAGACCCT 180
 5 TTTTAAATC ATGTAGATAT AGCAAATAAA CATGACAAGA TTATTATTTT ACCTGCGACT 240
 TCTAATACGA TTAATAAAAT TGCmAATGGT ATATGTGaCA ATTTATTATT AACTATTTGT 300
 CATAcAGCTT TTGrAAAAC TtCTATATT CCAATATGA ATTTACGAAT GTGGGAAAAT 360
 10 CCAGTTACTC AAAATAATAT TCGATTATTA AAAGATTATG GTGTATCAAT ATATCCAGCA 420
 AATATTTcAG AAAGTTATGA ATTAGCGTCA AAAACATTTA AAAAGAATGT TGTCGCACCT 480
 GGAACCATAT AAAGTTCTGG gAATTCATTT GaGATTAGAA TATGGAAAAT CaTAAAGCGC 540
 15 GckATTGATT AGTTTAATGA ATGATTGGAG TCnTTTGAAG ATnCGATTTA CAATGG 596

(2) INFORMATION FOR SEQ ID NO: 1107:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 673 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1107:

ACTAGCTAAA AATAATATTC TATTCTTTT AACATGGCA GTTCCAGCGG CAATTAGTGG 60
 30 TATTTATATT AAATATATAA ACAAGGCTAC GGTAGAAAGA TTTTAAAT TAGTATTTT 120
 CATATTTTCT GTTTCATTTA TTTTGTAAAT TTTAATACCA AAACTTACAG GTGAGATACC 180
 35 TAGCTATATC AATTTTGAC TTATGAACTA TCAAACGCT TCGTACCTT CAGCATTTAC 240
 TGCCGGATTA GGCATTTATT TCATTATGAA AGGTTcAGTT AAACATAAGT GGATATATGT 300
 TCTATTTACA ATAATTGATA TCCCTATTGT GTTTATACCA GGAGGGCGTG GAGGTGCTAT 360
 40 TTTATTAATT CTTTACGGCT TATTGcATT TATACTTATT ACGTTTAAAA GAGGAATACC 420
 TATCGCAGTA AAAAGCATTa TGTATATTTT TGCATTaAGC ATATCTAGTG TATTGATTTA 480
 CTTTCTTTTT ACAAAAGGTT CGAATACTAG AACATTTTCA TATCTACAAG GTGGAACACT 540
 45 TAATTTAGAA GGTACTTCTG GgAAGAGGAC CGATTTATGA AAAAGGTATT TACTTtATTC 600
 AACAAAGTTC GTTATTAGGC TATGGGCCAT TTAActATta TAAACTaATC GGAAATATAC 660
 CACATAACAG CAT 673

(2) INFORMATION FOR SEQ ID NO: 1108:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 506 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1108:

5	TCACAGTGGC GGCACAAAAA GTAAGTGGAG ATTATTTTAA TTAAATTGAC CATAACGATG	60
10	GCACAATGAG CTTTGCTGTT GCAGATGTCA TTGGAAAAGG TATACCAGCT GCTTTAGCAA	120
	TGAGTATGAT AAAGTTTGGC ATGGATTCTT ATGGACACTC ACAATTACCG AGTGATGGTT	180
	TAAAACGTTT AAATCGTGTT GTTGAAAAGA ATATTAATCA AAATATGTTT GTCACAATGT	240
15	TTTATGGTTT ATATGAAGAA ATGAACCATT TATTGTATTG TAGTTCAGCT GGTTCATGAGC	300
	CTGGATATAT TTATCGCGCT GAAAAAGAAG AATTGAAGA AATTTCAGTT AGAGGTAGAG	360
	TGTTAGGAAT CAGTTCACAA ACACGATATC AACACAAGA AATTCCAATA TACCTTGATG	420
20	ATTTAATTAT CATTTTAACG GATGGTGTGA CTGAAGCTAG AAAAGTGAAG GTACCTTTAT	480
	AGATAAACAA AAACTTTTAG AATATA	506

(2) INFORMATION FOR SEQ ID NO: 1109:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 552 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1109:

35	TGATATTGAA AAAGATGTCA TTGTTAAAGC ACAAGAAAGT AAAATTGCTC AAGTTATCAC	60
	GAATTTGTTA ACGAATGCAA TTAACATTC TTATGAAGAT GGAGATATTA ACGTTCGTGT	120
	GTATCGAGAT GACTTTCGTG TCATTTTCGA AGTACAAGAT TTTGGTATAG GTATTAAATT	180
40	AGAAGACCAA CAACGTATTT TTGAAAGATT TTATAGAGTA GATAAAGCAC GAAGTAGnAG	240
	ATTCTGGTGG GACAGGTCTT GGATTATCAA TTACAAAGCA TATAGTAGAs GCCCACCAAG	300
	GCAATATTGA AGTGAATAGT CAAGTTGGCA AAGGCTCAAC GTTCAAAGTT ATTCTAAAAG	360
45	ATTATAAAGA ATAAaAATTA AAGTGTAAC AGCGCGTGTA TTTTTCACGA AGTTGTTGCT	420
	GCTTTTTTAT TTCGTTCAAA TCTCTATTGG TATTAAATTA GAGTTAATGA AGTGGAATAA	480
50	ATTCGGTTGT CAATTTTGTC ATTTGTATAT GTCGATTGT AAGTTATAAG TAATAGATTG	540
	TTGTGAATCA nG	552

(2) INFORMATION FOR SEQ ID NO: 1110:

(A) LENGTH: 244 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1110:

10 AACAGATCAA CAATTGCAGA TCAATTACTC GTCATATTGA TCAATTATCT CTGACAACGA 60
GTGATGATTT ATTACGTCAT TGATTGATCA TCACAAGATA AGTCGCTATT GATTTCTCAA 120
TTTTACAACG AATTAGGAA AGCTGnAGCA GATAATTGGC TAAGTTGGAC GATAAAGGTT 180
15 ATCAATCGCC AATCGTTGCC ATTGAAGAAC TTTTGCTCAC TGGCGCACGC TTCAGATGAT 240
ATTT 244

(2) INFORMATION FOR SEQ ID NO: 1111:

20

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 825 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1111:

30 AGTATTGAGT GTTTTGATTT AAGAGACTTG GAAAGTGAGT CAATAATCAA AATCTTACTC 60
AATACTTTTA TTTTGGTACT CGCAATTAG ATTTGTAAAC TAATTTTTTC GCTTATTATA 120
AAACGAAACA ATCAAGTAAA CGATAAGCC TACAAAGATA CCCAATAAAA TAGATAGTAC 180
35 TGCCGTCACT ATTAATGGTA ATTTGAAAAA TATTTGTAGG AAAATmCCAA TGATAATTGC 240
GATAATTACT GCAAtTaATG TGACTGTATT TTCATTTGAA ATGTTcATtT ATttTCACTC 300
CTtAACAATA ACATTATATC ATGCTATAGC TTTCCAAAT ATTGAAATAT GTAGATATGG 360
40 CTATTGACGA TATTTCTTAA CTTTATATG ATTAATCGGA ATGAAAAAG AGAAGTAGGT 420
GGCAATATGA AGTCAAATAA ATCGCTTGCT ATGATTGTGG TAGCCATCAT TATTGTAGGT 480
GTATTAGCAT TTCAATTTAT GAATCATACG GGTCCTTTCA AAAAGGGGAC GAATCATGAA 540
45 ACTGTACAAG ATTTAAATGG TAAAGATAAA GTACATGTTT AAAGAGTTGT GGATGGTGAT 600
ACATTTATTG CAAATCAAAA TGGTAAAGAA ATTAAAGTTA GGCTTATAGG GGTGATACG 660
CCAGAAACGG TGAAACCGAA TACGCCTGTA CAACCATTTG GCAAAGAAGC ATCAAATTAT 720
50 AGTAAGAAGA CATTAAACAA TCAAGATGTT TATTTAGAAT ATGATAAAGA AAACCAAnTC 780
GCTATGGTAG ACCATTGGCG TATGTATGGA TAAGTAAAGA TCGTA 825

55

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 621 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: doubl
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1112:

```

10 TCCCTATAAA TCCCCACAAA AAAAGGGTAA ATCCGAACGT CAAATTTTCAT CTCTTTATGC      60
   CAATCAACGA TCGATTTACC TTTTAAAATT TAAAATGTAT CTGTAATACT CTTAGCAATA      120
15 TTTGTATATG CTGCATCTTC CATAGGTGGA TTGTGTAATC CTGCACGCAT GTCACGATAG      180
   TAACGTTGTA ATGGTCGATT CATTCTAAG CTTTTAGCAC CAACTATTCT CATCGCTAAA      240
   TCAATCACTT CAAGCCCTTG ATTCATTACC ATCACTTTAC TCGCACITGT TGGATTTCTT      300
20 ATCTGACTGT CATCTTTATA TTGTTGATAC CCTTTTGCTG TACTCCATAA AAATTGTCTC      360
   GCACATAACA ATAGCGTTTC CATTTTCCCT AAATTTTGTT GCACAGTTGG CAATGTTGCA      420
   ATCGTTCCTT CAATACTATT AGGGCTATGT TGGATTGCAA AGTCTACAGC ATAATTTCTA      480
25 GCAGCTTG TG CTATACCTAA ATAACAGCTT GGTATATGCA ATATCCAACC ATTTGGCGCT      540
   TTACTTTTCT CTGTTTCCAC TAAATGTTTT AATGGTACTT TTACATCATT TAATATTAAA      600
   TCATGACTTT CTGTCGCTCG C                                          621

```

(2) - INFORMATION FOR SEQ ID NO: 1113:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 619 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1113:

```

40 GTACCTTGTT TTTCAAGTGT AATTTCCCAA ATATAACCTG GTGTAATACC GTATTGTTTT      60
   GAGAAGTACT TGAAGGCACC TTCACCTGTa ATCATGGCAC GTTGTTCCTC TGGAATGTCA      120
45 TTAAATTTGT CTTTACTGTC TTTACTGTCA TTATTTAATT TTTCCAATG AGCAATGTAT      180
   TTGTTACCTT GCTTTTCATA ATCTGCTTTA TGTTTTTTGT CGTTATCGAT AAATGTTTGT      240
   TGAATTGTTT TTACGTAATT AATACCGTTA TCTAACTTA ACCATGCGTG TGGATCTTGT      300
50 TTATCTTTGT TGCCTTCTTC ACCGTTTAAA TAGATAGGTT TAACATCTTT TGATACTGCG      360
   ATAACCTTTT TATCTTTTAA TGATTTACCA GCCTGTCTTA AGGCTTTTTC AAACCAACCG      420

```

ATATCyTTAG GTTtAACyTC aTawTCatGA GGATCTkGAC CAACAGGTAC AATACnATGA 540
 ATATCGACGT TGTCTCCACC AACATTTTtA GCCATATCAG ATAGAATTGA ATTCGTCGnt 600
 5 ACTACTTTnA ATTTGCCAT 619

(2) INFORMATION FOR SEQ ID NO: 1114:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 549 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1114:

GAAAACCGCA CGACAATGAA AAAAGATATC CGGTTAAAT GGTCGATAAT AAAATCATTC 60
 20 CAACAAAAGA AATTAAAGAT GAAAAATAA AAAAGAAAT CGAAAACTTT AAGTTCITTG 120
 TTCAATATGG TGACTTTTAA AATTTGAAAA ATTATAAAGA CGGAGATATT TCATATAATC 180
 CAGAGGTGCC GAGTTATTCG GCTAAATATC AATTAATAA TGATGATTAT AATGTAAAC 240
 25 AATTACGCAA AAGATATGAT ATACCGACGA GTAAAGCTCC AAAGTTATTG TTAAAAGGTT 300
 CAGGGAATTT AAAAGGCTCA TCAGTTGGAT ATAAAGATAT TGAATTTACG TTTGTAGAGA 360
 AAAAAGAgGA AAATATATAC TTTAGTGaTA GCTTAGATTA TAAAAAAGC GGAGATGTAT 420
 30 AATCATGGCT CAATCAGAAT ATGAAATCAA TCCCGGAAAA AGAGAGTGAT GAAATGATAA 480
 AACGTGTAAA TAAATTAGTG CTTGGTATTA GTCTTCTGTT TTTAGTCATT AGTATGCACT 540
 GCTGGTTGT 549

(2) INFORMATION FOR SEQ ID NO: 1115:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1115:

TGTTATTGCA ACTATTAAAA ATATnAAAA CAAAGACTTA ATTGATTATT CTTTATATAT 60
 TAAAAAGGT TTAGTGAGC CATTTATTGT ATTCTATAAT CAAGAAAATA TATTCTACAT 120
 50 TAGCAATGCT GTTATAGATA TCATCAGTGT ATCCAAAGAT ACTCTTGATT ATATAAAGTC 180
 AGAATTCAAT GATCACTGTG tTCGCCATAC TGATTTTATA GCACAGAGAA AAGCCGTAGT 240

TTATCATCTT CGATGAA

317

(2) INFORMATION FOR SEQ ID NO: 1116:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1116:

15	ACTATGACTG CAATGCCAAC AATGAATGTT ATTGCATAAA GCATATGCAT TTAATCAAGC	60
	TTATGTTATT TAGCAAGGGC AAGCCACTTC TCGATTCATG GCTTGCCTTA TTTTATTGTA	120
	TATTTTAAAT TATCGTTGCT GGGCCCTTGA TTGACAATCG TATTAAAATG GCCTTATTAA	180
20	GTCAACTTTG TCTATACGGT TTGGAATCTT CTACCCAATG TCTTATAAAA GACAATCCCG	240
	CACCTGAAAC ATAACATG AAATAAGAA nATGGTATAC CATTAATnTG AATCCATTTT	300
	CAnTTTATAA CGTTGTAAAT GACACATAAT TAGAATCATA AAGTTTTTCG TGGGATATTG	360
25	AAACTTTACC CATACGAGAC ATCATGGATA AAAGCGAGGC	400

(2) INFORMATION FOR SEQ ID NO: 1117:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 696 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1117:

	TGCATATAAT GTTCAAACGG CAATGATTCC ACTGTATAAA CCTCTTGTCG TGGATGATCT	60
40	TTAATTGTGTT GTTTTAATAA CTGAACTCTT TTTTCATGTT CATAATGAAC ATAAATAAAT	120
	GCACTAAGAT ATATCACAGC TAAAACTAGT GATGCACCTT TAATAAAATT AACATTGATT	180
	GACTTATATT TCCGAAATTC TTTTAATAAA ATAATTAAAA TGATTACATG TATCGTATAA	240
45	ACAATCAAAA AATTACCTGG TTCTATTGGA GTAACAATGA CTAGTGTCGA CGCCGAAACA	300
	CATATTGCAA TAAGTAAGGA ATATAAAGTG ATTTGTGTTT TACGATCATT AATAGACAAA	360
	TAAATACCTA CAAATATCGA AAACGCAAAG TAACCACATA CAATTACGTT CACAAAACCA	420
50	ACCAATCCAA TATCTGTATT TTTATTTAAT AAAAAGTATG TGTAATAATAG TAAATAATAA	480
	AGCGGTAAAG TGATAAATCC TATCATAATG ATACGACGCT TTAATATTGT TAAATGTACA	540

ATCTGACTGA AAATGACACC ATATGGAAGT GACGTTGATA TCATTTCTGC AAATTTTGAA 660
 AAGATACCTT GATTATTGA AACTTGTGTA TATTCT 696

(2) INFORMATION FOR SEQ ID NO: 1118:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 223 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1118:

GCAGTGACAA TCAATAATTT GTAAC TAGAA GATAATAAG AGAACGCTCT ATAGAGACGA 60
 ATTGAAGGTT TGATTTTAAT GTCTGTTAGT AAGAATCATA TCAATGAGAT GCCTATAGTA 120
 CTCAGANTAT ATTAAATTAA AACCGTCATT AATTGTTTTT CCGAAAACCA TTTGTAACCA 180
 TTTnAATGTA GTTGGACCTA CCTACGTTCT CCAATAATCC ATT 223

(2) INFORMATION FOR SEQ ID NO: 1119:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 265 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1119:

CTGCTTTACC TTTTCCAAC TTAGAAATTG CTACATAGGG GCCTTCTGCT TTACCGCCCC 60
 AATTCCAATT CCACATTTTC AAGAAATAAG GAGGCAAAAA TGTT CATATA TGAATTGGAA 120
 TTATTGTTT TCTTATTAGG CCGAGATGCG CCGCGTGCGG CTGCTGGAGA TGGCGGACGC 180
 GATGGATATG TTCTGCCAAG GGTGTTTTC CGCATT CACA GTTCTCCGCA AGAATTGATT 240
 GGCTCCAATT CTTGGAGTGG TGAAT 265

(2) INFORMATION FOR SEQ ID NO: 1120:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 329 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1120:

CATGACATTA CATGCTTATT TAGGTAGAGC GGAACAGGT AAGTCTACGA AAATGTTGAC 120
 CGAAATAAAA CAAAAaATGa AAGCAGATCC GCTTGGAGAT CCAATCATTT TAATTGCGCa 180
 5 ACTCAAAGTA CATTTCAATT AGAAcAAGCC TTTGTCaATG ATCCGGAATT AAATGGTAGT 240
 TTAAGAACAG AAGTGTTCa TTTTGAACGA TTAAGTCATC GTATTTTcCA AGAAGTTGGT 300
 AGTTATAGCG AACAAAAGTh ATCTAAAGC 329

(2) INFORMATION FOR SEQ ID NO: 1121:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 252 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1121:

ACACCTCTTT TTAAATATAT GTGAACATA TATAGTGAT AGAGAGGTTA CTTGTTACTC 60
 AATATAACA AAAATCAACT TGTCAAAAT AAATGTGACA AAATTAAATA AAGTGTATC 120
 25 AATGTGACAG TATAGATCAT TTTGCAAAAA GTCAAAACAA AAAAATTGTT TTAGGGATT 180
 TTCAAAATTT TCATTGTGGA AAATGATTG nCAAAACAAA ACAACACnTT GTGAGCAATG 240
 AAGCTTCAAT GG 252

(2) INFORMATION FOR SEQ ID NO: 1122:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1122:

nAATAATAGG CGCCACCTAA TAAACCAGCT GGAATGCCTA TCATTGGTGT TGTGAATGAG 60
 CTTAATACAA TAACAAGTAT TGTAAAGCA ATGACGTTAT ACCAAGTTAC AGTCAAATTT 120
 45 TTCAAATCCT CATATGATTG TTTTACTAAT TCTCTAAATT TCATGATTCA ATCTCTCCTT 180
 TTCTTAAATC AATTAATAGT TATACTGCAT TGCTTAAAT CAAnATATCT AATGAAGCAT 240
 CTTTAAATCG TAAGTGTTAA ATGGTTTCT TAATCAATTT GTTTGAATGT ATAAAnAGCAA 300
 50 TTAAAGCAAA AGTAATGTAA ATGAGGGTGT ATACAACAAT TACTACAATA ACCGGCATGA 360
 AGGAAATATT ACCCATCAAT TTCATAAATG CGATTGCGGC 400

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 270 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1123:

10	AATACAACCT TTTATCATAG TGTAATGTA TTCTACCACT ATTGAGAAGT TTTTCATATTA	60
	TTCAATACCT GAAATCGCCA TAGTAATATT ACTAAATGCA CACTGCATAT GTTGTTTAAC	120
15	AACACAACCT TAAAAATATA TTCTAACTCT ATCTACGAAT GTACTTAAAT ATCATAACAA	180
	TCTATTCCAA ATCAATTAC ATTATTAGCT ACCTTAAAA CCAAACCGAG GCCTTAGGCC	240
	TCGGTTTAAA TATATATAAC GCGGACATG	270

(2) INFORMATION FOR SEQ ID NO: 1124:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1124:

30	GGTCTTCTGT ATCAAATTAT ATTATGAGAG TTAGACTCAG TATTAATGAA ATCGTTGATA	60
	AAGATCAAGT GCTTGCATCA CAAATAGGTG GATTACTATG ATGTTTAATC AAATTAATAA	120
35	TAAAAATGAA TTAGAAGAAT CATATGAATC TGAGAAAAAA CGTATAGAGA ATGAACTGCA	180
	AAATTTAAAT GAACTTAGGC ATAGAACTCG AAAAGAAAAT GAACGTAGTT ATGATGTTTT	240
	TCAATATTTG AAGCACGAAA TGAATTATAG TGAAGATGCC CAAAGGAAAA TGACGAGAAA	300
40	TATAGAAGCG TATGAGCAAG AAATCAATGA GATAATTAGA AAGCAAGAAT GGAAATTAGG	360
	AAGAATATAA AGAAGACTTA AAAAAGTCTT ATGAAAAGCA	400

(2) INFORMATION FOR SEQ ID NO: 1125:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 377 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1125:

AAATATATTC GATCATTGAT AATATGTGCT TTACTATTCC AAATAACTTT CAAATTTTGA 120
 TAATATTCAT CAATACTCTC AATATAACTA ACCAGTTTAT ACAACCATTC GCCATCGACT 180
 5 TTCACATATT TTTGAATACT ATTTCCAAyT TtAAGACGTG TTGGTTCATT TACAAAATGC 240
 CCCAAATTAA TACCACTTAA TAATCCAAAT GGAGTTGGAC GTGTTGACAT TCTAATTAAA 300
 TATTTAATA AACTTTCTTT AGCATCTCTA ACCTTCTTGT TATCGCCATC AAAATTTATT 360
 10 nCnTGTAAG TACAATA 377

(2) INFORMATION FOR SEQ ID NO: 1126:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 227 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1126:

GTTACATTAC TGTTTCATGTC CACAACGTTT GTCAGCGATT ATCATCATTG TGTTATATCT 60
 25 TATTTATAGC AAGTGCATGG TCTGGATAAG TAAAGGTATT CATACTTAAG TAACTTGAAC 120
 ATTGGTTTAG GACTATTTTA ATGGTnCTGC TtnAATTGTT GGCCAACCTGG TTCTTATTTT 180
 30 AAATATGTAA CTAGCTCTAC GGGTAGTTAC TAAACACATC CTGGTTT 227

(2) INFORMATION FOR SEQ ID NO: 1127:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 717 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1127:

CCAATGATAC CGTTATAGCA TGTTAATGTT TTGTACGAA TATAATCTAA AACTTCGAGT 60
 TCATCACTTA ATTTCCACGT TTCTGCTTTG TTAAACCACA TTAAAGGAGT ATGAATGnCA 120
 45 AAATCTTTGT CCATAGCTAG GCTTAATGTT ACGTTCATTG ATTTTATAAA ACTATCGCGA 180
 CAGTCTGGGT AGCCTGAAAA GTCTGTtTCA CATACGCCTG TAATAATATG CTTAGCCCCA 240
 50 ATTTGATAAG CTAGAGCGCC TGCAAACGAC AAGAAAAGTA AATTTCTAGC TGGAACAAAT 300
 GTATTAGGTA TACCATCTTC ATTATTAGTA ATTTCCATAT CATGTTGTGT TAATGCGTTT 360
 GGAGTAAGTT GTGATAATAA TGACATATCT AAAACGTGAT GTTTCATTCC TTGATCTTGT 420

AGTTCAACTT CTTTGAAATG TTTTITGCA TAAAAGAGAC ATGTTGTACT GTCTTGACCA 540
 CCACTAAAGA CAACGATGGC TTTTTCATTA TTTAATACAC TTTCCATTTT GTAATTGCTC 600
 5 CTATCATTAA TAATATTAAT AAAGAGGTGA ATGGCATTGA TAAGCCCGTT TTTAATTTAT 660
 AAAATAAAAA AAGCCnATCT CCATAAAAGA TAGACGanAG AAATGGGTTG CTCCTAT 717

(2) INFORMATION FOR SEQ ID NO: 1128:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 595 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1128:

GATTATTGCA TTGACAACTT ATATCTATCT AACGTTAGTA GCATTTAATT TCATTTCGGG 60
 GGTTCCTAACT TTACCAGGAT TAGCGGCGTT GGTATTAGGT GTAGGTATGG CTGTAGATGC 120
 CAATATTATC ATGTATGAGC GTATTAAGGA TGAACCTCGA ATAGGTAGAA CGATAAAGCA 180
 25 AGCCTTTTCT AAAGCAAACA AAGTTCATT CCTAACAAATT TTTGATTCTA ACTTAACAAC 240
 AGTTATCGCC GCAGCAGTAT TATCTTCTT CGGTGAAAGT TCAGTTAAAG GTTTCGCGAC 300
 AATGTTATTA TTAGGTATTC TAATGATCTT TGTTACAGCC GTGTTCTTAT CAAGATTCTT 360
 30 ATTATCATT A CTGTTTCAT CAAATATATT CAAAATCAA TTTTGGTTAT nTGGTGTTAA 420
 AAAGAATAAA CGACATGATA TTAATGAAGG TGTAGATGTT CATGACCTTA AAACCTTCATT 480
 35 CGAGAAATGG AATTTTGTTA AATTAGCTAA GCCATTAATT GGAGTAAGTA TTTTAATTGT 540
 AGTGTCGGTT AGTTATTCTnT TATATCTCAA GTAACTTAG GAnTGAnTCT CAAGT 595

(2) INFORMATION FOR SEQ ID NO: 1129:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1129:

ATTTTAACTT TCTAAGAACA AGTTGTCAAG ATTTTTCCTT AACATATCAT GTTCTGTTAC 60
 50 AATATTAATA ATGAATACCG AAAGGACGAA TTGCAATGA AAAGCGTTGG CTTAATCACA 120
 GAATATAATC CCTTTCATAA TGGGCATCAA TATCATATTA ATCAATCTAA AAAACTTACA 180

ATCTATAATA AGTTACTCGT GCAAAATGGC TTTCCACCGC TGTTTAGTTT CGGACTACCA 300
 GCAACTGCAG TTATCACTGG CGnCATTTGC GACTGCCGTT AAGCGCGGTT TTGGTGCGTA 360
 5 CATGCnTGGn G 371

(2) INFORMATION FOR SEQ ID NO: 1130:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 200 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1130:

ATGATGATGA GATTATGACT TTGCGAAAGA TATCGGTGCG CCTTATGAAT TTAAAACAnA 60
 nTAAAGACCA TGGTCGTTAC CGGTAGTTAA CTTTGCAGCT GGTGGCGTTG CGACTCCTCC 120
 AAGATGCTGC TTTAATGATG GAATTAGGTG CTGACGGTGT ATCCGTTGGA TCCGGGAATT 180
 TTAAAACCAG AAGATCCCGG 200

(2) INFORMATION FOR SEQ ID NO: 1131:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 203 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1131:

ATGAGCTAGT CGATTAAAGT TAATATTTGA AAATGAAGCA GGGCATTAAA TGCAATAAAT 60
 TAAATAAGTT GTCATTAAAG CATTAAATAAT AGAAATGATT TTAACAGGAA AAAAGTGATG 120
 AATATTTGGA AAAGATATAT ATCGTGCACT GTCCTGAGAG ATTAGATTG GGAAACCAAT 180
 TTATCCnTGA ATCGAGATGT nGC 203

(2) INFORMATION FOR SEQ ID NO: 1132:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 182 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1132:

ATCTAACAGT ATTGAAATCT TTGTTAGCGT CAATCGACCA TGTATTTTGA AGTATTGTCT 120
 CTAACAACCTT AGCAGGACGT CTTAACCCCTT TAGTAAACAA TCCTTCTTTA GntTTTAGTAC 180
 GT 182

(2) INFORMATION FOR SEQ ID NO: 1133:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 485 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1133:

CAAATTTAGC CAGGnATACA AATACATATA ATAAACTGT TTGTAAGCTT ACGTTGACAA 60
 TCTGGCGTAA TTGGAAAACCT AATGAATTTT CTCCAAGTAG GTTTTACCCT GTAAACmAAA 120
 TAACAATTCm AATAATATGr AATCACAAG CGACTAGAAA TCCGGTAATA TGAATAATCA 180
 TATATTCAAT GTGTAAaTAAT TTTAACAGCA ATAAATAGAC AACATAATAA TTTAACGTAT 240
 TAATGCCGCC AACAAATGATA AATTTTAAAA TTTCAGCATG CGTTTGTGTT AGTTTCATAT 300
 GTGTACTCCT CAACATCAnA ATATATGCAT AACTACGTTT TCGAACATAC TCGAATATGC 360
 GAGCCAATCC GCTTCACTTC AAATATGCTT ATTCAATCT TTATACCCTT TCACAGCAAT 420
 TTAGTCTCTT TnCCCTCATC CTTATAGGCC nTATATGTAA CCGATTATCG GGTGGACTCA 480
 TTGGC 485

(2) INFORMATION FOR SEQ ID NO: 1134:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 213 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1134:

CTTGTTTTAT CGACAGATGC TGAACACGCA GTCaAAATAA ATAAATTACA TAATAAAATT 60
 CCAATTAATC TTTTCATAAT ATCATCCTTT TGTTTTTCAA TTGATATTCA TTTTCAATTA 120
 TAAATATTA TAAGAATTAG TCAACGCCTG TGAGTAATAC ACATCAGTAA CATTICTATT 180
 TTCATTTATG ATATTATCTA ATTATTAATT TAT 213

(2) INFORMATION FOR SEQ ID NO: 1135:

- (A) LENGTH: 526 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1135:

10 TGTGACTCCA TGTATTCATG TATCATTGTA CATTGTGAA TTGGTTGAAA ACTGATAGTG 60
 CCGGTTTAAT TACAGGTACT GAGGATGCTT TCAGGACATG GATTTGTTCG AAAATATGAC 120
 AATATTTTAC TATGGCTCTT CACTTCTCTA GGGAAATTGC TATCTTGATT AATCCAATCA 180
 15 ACCAATTCAC CTAATGGTGT GTCATCACCA AGAAACTTT GCATAAATTC GTAAAAGCTC 240
 AATACCTCAC CTCGATTaAT ATACTTGAGC CATTaATATA ATACCATAAA AGAATGTGTA 300
 TTTTaCATAA AACTTTTTaT AAAGCAATTT TATAAATCTA AATTTATTGA ATGTTTAAGA 360
 20 AGTTGTGTAT AATGAAATAA ACGTGTTGAA ATAGTTAGGA TGATGTTAGT GGATATCAAA 420
 CATATGAAAT ATTTATTGA AGTCGTTAAG CAnGGAGGCA TGACTAATGC TTCCAAATCA 480
 TTATATATTG CACAACCTAC AATTAGGAAA GcATTAAAG ATATTG 526

25

(2) INFORMATION FOR SEQ ID NO: 1136:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1136:

35

AGCAAAAGCA ATGATGACAA AAGAACAAGC TATGTTAGCA GATGGAAGTA TTAAACAAGA 60
 TCAATATGAT AAACAACTGT TATCGAnAAT CGGAAAATCA CAATTAGATG AATTGTCTTC 120
 40 TAAAGATTTA CAAGTTTTAG CTATTTTTCC GAGAGATGAA TGCAGGAACA GTTTTAGATC 180
 CACAAATGAT AAAAnATGGA AGATGTTTCTAG TGCAAAAAGA GTATGGCAGC AGTTTTCTCC 240
 45 AGCAACTTTT CCAAnATTAC CCAGGTGTTT AACACGTCCT ATTGGATTG GGCTTAGGAC 300
 AATTATTCCA TATGGGCGGA T 321

50

(2) INFORMATION FOR SEQ ID NO: 1137:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1137:

5 ATAAATCCTT ATAAAATCAT GAGTTGGACG ACTTATCCAC ACAATTATAC TTTTTCAGTT 60
 CTCTATATGT CAAATACCTG TGAATATGTT GCTAAAAATA GTATAACTTT GTGTGTAATT 120
 TCTAATTATC CACAATTCTG AAAACTATAA ATGTGCATAA GTGGATAmCT TTcCTTCTAT 180
 AGAGTATCTG TTAGTGAGTG TATCAAAaCA GTTTGGGAAa TAATTtATAA AGTnTGTATA 240
 10 AGAnCTGTAT AAGGTGTTcG AACATTGTAA ACACTCATGC TTCGGACCAA ACTCATGGTG 300
 ATGTTATGAA ATTTGATTGC TCGCATCGnG 330

(2) INFORMATION FOR SEQ ID NO: 1138:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 459 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1138:

25 CTTGATAAGG GAAGATTGTC CAGCACCATT CGGGCCCATG ATACCAATTA TTTCGCCGCG 60
 TACTGGTATC GATAAGGAAA TGTTTTTAAG TACATGCTTA TTACCTAAAA ACAGATTTAA 120
 ATCTTTTGTT TCTAACAAAC GTTTATACCT CCTAATTAAA AGTTTAGGCT AACCTAATTA 180
 30 ATTGTATAAT AAAGTGAGAA TATTTATCAT GTCAAGTAAA TTCGTGATAT AATATAGACA 240
 ATGTATGTGA GGTGAAAGTA TGTTAACTGA AGAAAAAGAG GACTATTTAA AGGCAATCCT 300
 TACGAATAAT GCGGATAAAA ACTTTGTGAC AAATAAAATC TTATCTCAAT TTTTAAATAT 360
 35 TAAGCCTCCA TCTGTAAGTG AAATGGTAGG ACGTCTTGAA AAAGCAGGCT aTGTTGAAAC 420
 AAAACCATAC AAAGGTGTTA GATTAACAGA GGATGGTTT 459

(2) INFORMATION FOR SEQ ID NO: 1139:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 165 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1139:

50 TAAATACTCT CGCCGGTTAT TTCGCTTCCT CTATACGGAT TGGCGAAAGA TACGGTGCAT 60
 CGGTTTCAAC TAGCAAACGC TCCATTGACA CATGCTTAGC AACTTCTTTA GGCTGTTTAG 120

(2) INFORMATION FOR SEQ ID NO: 1140:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 214 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1140:

ACCTGAATGC CCATCAATGA CAGACTGGAT AAAGAAAATA TGGTACATAT aCACTATGGA 60
 ATACTATGCA GCCAGAAAAA AATGAGGTCA TATCTTTTGT GGGACATAGA TGCAGCTGGA 120
 GGCCATTATA TTTAGTAAAC TAATGCAGGA ACAGAAAAAC AAATACTGCA TGTTCACACA 180
 GCAGGAGCTG AATGATGACA ATTCAATGAAC ATAA 214

(2) INFORMATION FOR SEQ ID NO: 1141:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1141:

GTTTCTAGTT GTTTATAGTT ATCGCATCTC TTGATGTAAA ATCTAAGATG TTTATGCATT 60
 TCTAGATGTT AATTCTTCGC TGCTTAAGAA TTATCTTGAT GGTAAATCTA GTTGTGCCAT 120
 GCATTTTCTC ATGATGAATC TAAGGTGTTA ATTCATTGAT GTGTGCTGTT TCTTGnnGCT 180
 TCATTATCTT GATGGTGAAT TTCGTTGTCT AATGCACTTT TTCAAATGA 229

(2) INFORMATION FOR SEQ ID NO: 1142:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1142:

TTATGAATCG TAAACACTAT TATGAAATTG CGAGAGTAGT ATGGACAATT AGAATGATGG 60
 TTTGAGATnA ATGAGTGTTA TTAACCAGTG CGTCATTTTC AAAATTAGAT GCCATTTGCT 120
 GTTTATAATA AGAAGATTTG ATAATTAACCT ATGATAAGAA AAAATAATAA TCCCCTAAAT 180

GGTAAATGTG TGAATAGGAA TATCGTTaAA CTAGTTGTGT TCATGCTAAT TTAGTTGTA 300
GCAGTAGCGG G 311

(2) INFORMATION FOR SEQ ID NO: 1143:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 403 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1143:

GATCATGCTG CTTATGAATT ATTAAAAGAG CAATTAGAAG ATGTGCTTGA TACATTAAC 60
GATAGAGrAG AAAATGTATT ACGATTAAGA TTTGGTCTTG ATGACGGCAG AACAGAACA 120
CTTGAAGAAG TTGGTAAAGT TTTCGGTGTT ACACGTGAAC GTATTCGACA AATTGAAGCA 180
AAAGCACTTA GAAAATTAAG ACATCCAAGT CGTAGTAAAC GTTTGAAAGA CTTTATGGAT 240
TAATTTATAT CAATTTTAAT GATTGATACC AAGACATGAA TAAGCGCTTA TTTATTTTAA 300
GATTAAGATT TAACCTGAGT GAGGTTGGTA CATTGAATAA TGTTCAACCT CTTTTTTCAT 360
AAAGGAGAAT AAAATGATTT CGTTAAATAA CCGATTAACG ACn 403

(2) INFORMATION FOR SEQ ID NO: 1144:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 612 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1144:

nTTTTTAATTG ACGAATnGAT TTGGATGCCA GTGGTTTGGT CCTAAATCTT GAATGGTAAT 60
CGGTATTTTG AAGTTGTCAT GTGCTACACG GTAACCGATA CnATAAGTA CGAGTGCGAT 120
GACAATGGTT GTTACGAGCA AGATGTATTG TAACCATTGC TTGAACACAA CAAGTTGTAT 180
ATAAGGCTTC ATTGACGATA CCTCCAAACC AATACAGCTA AATTAATTAT CAAAAGTGCG 240
ATGAAsCTAA GATAGAAACT AGGGTGCACT TCTAAAATGT AGTTGTTTAA AATAATTTCT 300
AACAAATTGAT TTGTTACAAC TGCGAACGGT TGAATATTGA AAACACCATT TGCTATATGT 360
TGTAACAAAAA TCGTAGGTAT TGTTAAACCA GATAACACCA GGATGACAAT AGCTAATATG 420
ACTTTACTAA TACTATTCAA CAAGCCTGTT GTTAAAAGTT CGATGAGTAA TAACCACAGT 480

AAGATATTTCG GAATACTGAA CACAATCCAA ACTACACCAA CGATACTCCA TAACATAGTA 600
TAAACCATG Tn 612

(2) INFORMATION FOR SEQ ID NO: 1145:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 223 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1145:

GAATTAATTA CGCAATATCC GCATCTTAAA TCAGTAATCG AAAAATATGC TTAAAAATAA 60
AAGTGATCAA TGAAGTGGTT TGAAGGTTGT NAATAAACCT TTGAGTCACT TCCATTTTTA 120
AAGTATCCT GGATGGAACC AGAATAGATT TGAAGCTTCA GCGGTTTTTA ATGAAAATAG 180
CCATTAAATG ATTTGGAAC GGTAAAGAGGG GGTATTTAAA ATG 223

(2) INFORMATION FOR SEQ ID NO: 1146:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 598 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1146:

CGCTACGGTT GTCACGTAGA GATTAAAGAC ATTCGTTTTA GCAGTCTTTT TTATTGAAGT 60
AGACAATGCA AGATTAAATG GTAGTGTATC TTCATTTTAT TCAACTGCTA GTAATACAAT 120
ACTCAGTGTT ATTTCTGAAG ACTGGTTGAT AATGAGACAT GCATATTTAC AAACTGTGT 180
ATATTGTGTA TATTGTATAT ATACAGAAGT TGATAGGGGG ACGTTGATGA AAATAATTTT 240
AAAAACAAT AGTGATTTTC CGATTTATGA ACAGATTAAG CAACAAGTAA AACAAAATAT 300
TTTAAAGGGA CATGTTGCTC CTGGAGAGCA TTTGCCGTCA ATGAGAGAAC TTGCCAAAGA 360
TCTTCAAGTA AGTTTGATTA CTACCAAACG TGCTTATGAA GATTTAGAGA AAGACGGTTT 420
TGTTACAACA ATTAGAGGAA AAGGGACCTT TGTTAAGGAG CAAGATAGTT CTATTTTAAA 480
AGAGAAACAA TTTTTTACCA TGAAAATTG GGTAAAGGA ATTGGGTAA TTAAGCnCAA 540
GCCCATCCGA ATTGCCACTT GAGGGAnTTC CAGGATATTT nACCGTCATT TATTGAGG 598

(2) INFORMATION FOR SEQ ID NO: 1147:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1147:

10 CAAATCCAAG TGCAACAGCT TTATCAACCG CTAAAGCTAA ATCCGTATCA GCTTTTTCAG 60
 CTTGAACTGG TTTGATTTGT AACTGTTCTG TTAGAAGTTG GCGTTCTTCT TTACTGACTG 120
 AATCAAAGTC TCCCACTGAG AAAAAAGGGA TAATTTGATG CTTCAATAAA ATCAAAGCAC 180
 15 CTCTATCAAC GCCGCCCAT TTACCTTCAT TACTTTTGGC CCAAATATCT TGCGGCAAGT 240
 GTCGATCAGA ACATAATAAA TTTATATGCA TATACACTCA ACCTTTCAAT GCTTGTGTGA 300
 CTTTTTAAAA TCCCCTGGTT AAAGGAAAAT GAACnGGTTA CCAGCATTGT AGGCACCATT 360
 20 TCAACACCAA CTTCGGCGGA TCnGGATTAC GCCTCCATCC 400

(2) INFORMATION FOR SEQ ID NO: 1148:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 352 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1148:

TTTTATGGGT CGTATTTTTT AAAGAACAGT CATCTCAATC AAAAGAATAG AATTATGATT 60
 35 AAAATTGATG TrGTGTAATT AAAGTAAGAA ATrrkAAATT TCCTAGATAC TAGATAAATC 120
 GTTCAATATT TTATTAATAA GGAGGCCAAT GAyTGTGAAT TATCTTAAAC ATAAGTTTIA 180
 TAACCTGTGA ACTACAATGA TTGTTCTCTT TATTTTGTGA CTTTCTGGTG CGATTTTTTT 240
 40 AACATTTCTA GGGTTTGGTT TATATGGATT AAGTAGAATA CTTATTTATT TTAGGTTGGG 300
 TGACTTTTACA TATAATAGAA GTATGTACGA TAACCTATnA TATTATGGCA GT 352

(2) INFORMATION FOR SEQ ID NO: 1149:

45

(i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 916 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1149:

GGCAAGTGTC GATCAGAACA TAATAAATTT ATATGCATAT ACACTCAACC TTTCAATGCT 120
 TGTGTGACTT TTTTATAATC CTCTTGTTTA AAGAAAAATG AACCTGTTAC TAGCATTGTA 180
 5 GCACCATTIT CAACACAAAC TTTCGCTGTA TCGGTATTTA CGCCTCCATC AACTTCAATA 240
 TCAAAGTTTA ATTGACGTTT CATTTTAATA GCATTAAGAC CCGCTATTTT TTCTACGCAT 300
 TGATCAATAA ATGATTGACC ACCAAACCCT GGGkTAACTG TCATCACTAG TACATAATCA 360
 10 ACAATGTCTA AAATAGGkTC AATTTGTGAT ATkGGkGTAC CAGGATTAAT TACTACACCA 420
 GCTTTTTTAT CTAATGTTT AATCATTTGA ATAGCAOGAT GAATATGAGG CGTTGATTCTG 480
 15 ACATGAATTG AAATCATATC GGCACCATGT TCTGCAAATG ATGCAATATA CTTTTCTGGA 540
 TTTTCAATCA TCAAATGTAC GTCTATAGGT AATGTTGTGC CTTTTCTTAC TGCATCTAAT 600
 ATTGGTAAAC CAATAGATAT ATTAGGCACA AATTGACCAT CCATAACATC AAAATGAACT 660
 20 CCGTCGACGC CTGCTTCITC AAGTCGTTTT AATTCATGTT GTAAATCCAA AAAATCAACA 720
 GATAATAATG ATGGATATAG TTTTGTCAAT TAATATCTAA CCTTTCTATT TGAAATTTCa 780
 TTAAATAGTT GTAAATAATG GTCGTATCTA AATTGCGCAA TATTCCTAT CTCTAATTGA 840
 25 TGChTAACCA TTACCATTAG GGTCTTGGn AAGGnTACCA ATCCCAAACC TTACCATGGT 900
 TCCCCCATAA CGGTTT 916

(2) INFORMATION FOR SEQ ID NO: 1150:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1150:

AATTGGTTGT GGCTTCATAA TGTGCAGTTG CTAGACTGAC AACACATCG TTTTCTAAGC 60
 CTACGATAAA GACATAATCG TTTTCGGTTT TGTGTTTTTC TAATGAGCGT TTGATGATAC 120
 GTTATCTTC AGTTAAAGAT AAATTTAACT TAGTATCGTA AAGTTTAAGT GCTTCGTTGT 180
 45 AATGTGGATC TTTGACAGAT TGAATGGTTT TAAATTCCAT AAGAACACCT CCCCAATTTA 240
 AATAATATTA TAGCATAATC GCCTGCTGTA AAAGACTGTT CATAACTTT TAAATGGTAT 300
 AAAAAACTGT ACTATCTTAA ATTAGACAGT ACAGTAATCT CATTTTGAAT TCAGTGTGAT 360
 50 AACTAAGCtT TGGGACCTTT AGATGCnTTC ACAAATGTG 400

(2) INFORMATION FOR SEQ ID NO: 1151:

- (A) LENGTH: 156 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1151:

10 CACCGTAGTT GCTACCGAAT ACCACCATGT CGCCAGGTTG TGCTAAGAAG TCCGGTGTAT 60
 TTTGGTATAC AGTTAGCTAA TCCGTCGAAG TTGTTAGCGA CGGnATATCT TTTGACCTAA 120
 ACCTTTTAGA GTAATCCAAA CAAACTTTC CAACCA 156

15 (2) INFORMATION FOR SEQ ID NO: 1152:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 233 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1152:

25 TCAATATATT TATTTTCTAA TGTTAGCATT AGACTGTCAA TTAAC TTGCT AAGTTGTCT 60
 TTTT TAGTAA TTAAATAACG CATATAATCA TCTAAATTTT TCATTTTTC ATCTAGCATT 120
 30 AAAAGGTAGT GCTTGATATT ATTTCTACTG TTGCTCCAAA AACTGnTCAA ATATACGTCA 180
 CATAGTCATA CTACACCTTT ATATAGTTTA AATACCAATn GCATGACCTC GTG 233

(2) INFORMATION FOR SEQ ID NO: 1153:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 339 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1153:

45 TATATTAnCT ATCGTTTAGT GAATCGTTTT TTAAAGTAA AGAGAATTTT ATATATTACT 60
 GGTACAATA CAAGTGTTAA TAAAGTTGAT GAAATTmAAC CACCAATAAC TGTAGCAGCT 120
 AATCCTTTTCG AAATAAGAAT CGnGCTATCT TGACCAAATA ACAnAGGAAC TAATGCACCA 180
 50 ATTGTTGCAA TCGCCGTCAT TAATATCGGT CTAATTCTAG TACCGCCTGC TTCGATTAAT 240
 GCTTCTTTCA TCTCCATGCC CTGTTGCTCA TTATTAATAA CACGGTCTAT TAACACAATG 300
 GCATTTGTTA CTACGATnCC AATTCAACAT TAGCATACC 339

55

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 817 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1154:

10 GTCACCCGAG GAGATATnCA ACTATTACCA TCAAGATGnG AAAAATGGTg CCTTGGGCAA 60
 TTGGTTTTTTT CATTTTAATC TTAATTATTA TATTGTTCTT TTTACTAAGA AACTTCAATT 120
 15 CACCTGAAGC GCAAACATAA ATATTAGTGA ATGCGATTGA GAATAATGAT AAACAAAAAG 180
 TAGCAACATT ATTAAGTACT AAAGATAATA AAGTAGATTC TGAAGAAGCA AAAGTATACA 240
 TTAACTATAT CAAAGATGAA GTTGGGCTTA AGCAATTTGT CAGCGACCTT AAAAATACGG 300
 20 TACATAAATT GAATAAGAGT AAGACCAGCG TAaCTTCTTA TATTCAAACC AGATCTGGTC 360
 AAAATATATT ACGTGTAAGT AAAAATGGCA CACGTTATAT CTTTTTCGAT AATATGAGCT 420
 TTACTGCACC TACCAAGCAA CCAATTGTTA AACCGAAAGA AAAAACAAAA TATGAGTTTA 480
 25 AATCTGGTGG TAAGAAAAAG ATGGTTATAG CTGAAGCAAA TAAAGTGACG CCAATAGGTA 540
 ATTTTATACC GGGGACATAT AGAATTCCAG CTATGAAATC AACTGAGAAC GGTGATTTTG 600
 CAGGCCATTT AAAATTTGAT TTTAGACAAA GTAATTCTGA AACGGTAGAT GTTACTGAAG 660
 30 ATTTTGAAGA aGCAAATATA TCTGTAACTT TAAAAGGCGA TACAAAATTA AATGaTAGTT 720
 CTAAAAAGT AACTATAAAT GaCCATGAAA TGGCATT TTC AAGTTCCAAA ACGTATGGTC 780
 35 CATATCCACA AAATAAAGAT ATTACCATTT CCAGCTT 817

(2) INFORMATION FOR SEQ ID NO: 1155:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1155:

40 AnAGAAAATC TACTCTTTTA TTTCACCGGT CCTTTCnTAT CTCTCATTG GCATACTCCT 60
 TTTTCCATAT TTTCCACTTT CAnTACAGTG AATTTACATG TAATTTTACA AATACAATAG 120
 50 GAGTGCACAA TGGAATATAA CACTTATCTT TATAAAATTA TTTTATATAT TGaCGCACTT 180
 AAAACAATCT ACAAATAAAA TTATTATTTT TAGTTTTCaA TGAATAATTC ATTCTTATCT 240

ATTTAAAAAT ACATTTAACT GC

322

(2) INFORMATION FOR SEQ ID NO: 1156:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 777 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1156:

5	GTTTCCAAnG GAAnGnGAAA AGCGTCAACC AATGTAAC TA TTTAAAGTCA AAGTGTTTGA	60
15	CCAAATTTGA CTTAATATGT AAAATAATGA GTAACAGTTA TTACAAGGAG GAAATATAGA	120
	TGAATTTAAT TCCTACAGTT ATTGAAACAA CAAACCGCGG TGAACGTGCA TATGATATAT	180
20	ACTCACGTTT ATTTAAAGAC CGTATTATTA TGTTAGGTTT ACAAATTGAT GACAACGTAG	240
	CAAATTC AAT CGTATCACAG TTATTATTCT TACAAGCGCA AGACTCAGAG AAAGATATTT	300
	ATTTATACAT TAATTCACCA GGTGGAAGTG TAACAGCTGG TTTTGCGATT TATGATACAA	360
25	TTCAACACAT TAAACCTGAT GTTCAAACAA TTTGTATCGG TATGGCTGCA TCAATGGGAT	420
	CATTCTTATT AGCAGCTGGT GCAAAAGGTA AACGTTTCGC GTTACCAAAT GCAGAAGTAA	480
	TGATTCACCA ACCATTAGGT GGTGCTCAAG GACAAGCAAC TGAAATCGAA ATTGCTGCAA	540
30	ATCACATTTT AAAAACACGT GAAAAATTAA ACCGCATTTT ATCAGAGCGT ACTGGTCAAA	600
	GTATTGAAAA AATACAAAAA gACACaGATC GTGaTAaCTT CTTAACTGCA GAAGAAGCTA	660
35	AAGAATATGG CTTAATTGAT GAAGTGATGG TACCTGAAAC AAAATAATT C AAAGTAAAGA	720
	GTAGACTAAG CnGTCTGCnC TTTTGTATG AGTAAACCAA GGTGTCAATA ATTTGTn	777

(2) INFORMATION FOR SEQ ID NO: 1157:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 155 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1157:

50	TAATGTTGGT AAATGGGTTA AGGCTCAAGG TCGTATTGAA GAAGATACAT TTATTAGAGA	60
	TTTAGTTATG ATGATGTCTG ATATTGAAGA GATTAAAAAA GCGACAAAAA AAGATnAGGC	120
	TGAAGAAAGC GTGTAGAATT CCACTTGCAT ACTGC	155

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1158:

10 GACTGGTAAA ATTTACTTGC AAGTAAAGCT AAAAGGTCAA ATAGATAAAG AACAACTTGT 60
 TTTTCAAAAT GACAAAAATG AAGAATTTCC TTTTGTTATA AAAGATGAAA AGGATGACAC 120
 15 AATAGTAAGA ATTTTAATTG AACAGCATAT GGATAAAATC AATATGCATG TTAAACGTT 180
 GGCTGAAAAG AAAAATCTAG ATAACAAAGA AATGGTGTAT TCTATTCATT TTAAAGAGAA 240
 AAAAGTACAA CATGATGATG CAAAAGAAGT GCCTTCAAAA CATCAAAATC AAGAAAATAA 300
 20 TCAAGATCAG CTTAAANAG ATATTGATGA CAAANAAGAT AGTCAAAAAT CAGATACTAA 360
 GGGAAAGACG TACTAGCCTT TTTACTGGAA AAAGGGTTTA 400

(2) INFORMATION FOR SEQ ID NO: 1159:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 347 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1159:

35 GTTGGTACAG TGTTGAGTGG CTTTGAATAT CGAACACAAA AAGAAAAGTA TGACAATTTA 60
 TATAAATTTT TCAAAGATAA TGAAGAGAAA TACCAATATA CAGGCTTTAC AAAAGAAGCA 120
 ATAAACAAGA CGCAAAATGT CGsATATAAA AATGAATATT TTTATATCAC TTACTCGTCA 180
 40 AGAAGCTTAA AAGAATATCG TAAGTATTAC GAACCATTsA TTCATAAAAA TGATAAAGAA 240
 TTTAAAGAGG ATGGACCAGC CAGAAAGAGT GATTACGCGC TATCAGTCAG TACACATGTT 300
 AGTCCAGGAA TTTCTAGCAT CnGTGTGTGA ATGAnGGGTA CTTTATn 347

(2) INFORMATION FOR SEQ ID NO: 1160:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 203 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

ATAGTTATTA ATTAGTAGAA TGAGGATATT TAAATATAAA GGATAGTGTT GAACTTATGG 60
 ACATGAATTT CGATTATACA TGAACGGTGT TGTAGAACAA GCAAGGAATG AAATTGAATC 120
 5 TCGGGGATAT GAGCAATTAA CTACTGCAGA AGATGTTGnA AAGTCCAAGA TGGnCACCTA 180
 GTTATGATCA TCTGTATGTG GTG 203

(2) INFORMATION FOR SEQ ID NO: 1161:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 203 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1161:

20 AATTTCCnT TTCCATTGAC ATAACAATAT TTAATGGGGC CCAGTTACAG GAAATATCAG 60
 TTTAATTTTCG TCTTCAATAC CATAGTCATA ATATTGAGTT TCTTGTGTTG GAAAATTTCC 120
 25 TACATAGTTA CTCATTTTAA TTTGTnCAAT GTTTGAATTC GGAGGCACTC TGTTAGCATA 180
 TCTTTAAACA TTAAATATGG ATA 203

(2) INFORMATION FOR SEQ ID NO: 1162:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 220 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 35 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1162:

40 GCCATTTTGT TGATAAAGGT ATACTAAAGG TTATCGTTTT GAAATTTTGA GTAAC TAGGA 60
 TATGTTTCGT GTTATAGGAC CGGAATTTGT GGTATACGGT AAAATTTTAA TGCTATTGGA 120
 ATTTTAAAAA ATGGAAAAAC ATGGACATTn AAATTGGAAT TTCATAATAT GTCCTAATTG 180
 45 GACTTAACTT GTTGGGAGTT CATTTTACTA TTTnTATGGT 220

(2) INFORMATION FOR SEQ ID NO: 1163:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 409 base pairs
 50 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

TTCACGTGCT TTGCCATCTT TTAAGAAAAA CACAGAAGGC TTTTGCATTT GATTGTAATT 60
 GGATGCCATA GAGTAATGAT ATGCACCAGT TGATAATATA GCAAGATAGT CTCCACGTTT 120
 5 GACTGGATGA AGGTAATTTA GCGTCTTTAA TAATGATATC ACCAGACTCA CATAATTTTC 180
 CAGCTATAGT TACACTGtCA TCTGCTTCTT CATTTCTATT AACAAGCAAT GCTTGATACT 240
 TTGCGTCATA AAGTGCAGTT CTGATATGAT CACTCATACC GCCATCGATT GAAACATATT 300
 10 TATTATCTC TGGAATTTCT TTAATGGtTC CAACTTCATA TAAAGTAACG CCAGctTCAC 360
 CTACAATTGA TCGTCCCGGT TCAATACCTA TTTCTGGTGC ATCTATACC 409

(2) INFORMATION FOR SEQ ID NO: 1164:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1164:

25 CTAAATAATT GTTTAAATTT TTCTTTACTA TTTAGACTCT TTCGTTTGCC ATGACTTTGT 60
 TGACTTGCAA TGATATGAAC TTAATTTTTG CGAAAAAGG AATCTAGATT CATATATTCG 120
 GTAAATCTAC CTTCTTCATC TTTTGAAGT TGTAATTCTA GCAATTCACG TTGTATCAAA 180
 30 TTTTGAATAA CCATTGTAAT ATCACGTGGT TGCATAGTTG AGCCCTTCTG AAGCAATTCA 240
 ATTGAAGGCG TTTATTTGAG TTTCGAAGCA TAAATCAATT TAAGCAAAAG ACTAAATCTG 300
 35 CTCATCTAAA CCTAAGTCAC GTAAGGTCTA ATAATcNCTC GTATCACTAC GGTCTGCTTT 360
 AATGATATTA nCCAGTnCGT GCCCCTTTAA ATTAACCAa 400

(2) INFORMATION FOR SEQ ID NO: 1165:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1165:

50 TCGTGATTAT TATTAACATT TTTTAGTAAT TGATAAAAAT CTTTCTCGC TTCTGTAGGG 60
 CTAGTGATAA TCAATAAAC CCTCCTTTGT TTTCTGTTAC GCTAATTATA GCGTACGCAC 120
 TTGAGTACGT CATATTACCA ACGAGTTCAT CGTATnCTTA ATACCTATAT GCTATCGTTC 180

GGACACACTA CCGTnCCCTA CCGCTTAACC ATTTTCGGGC TTAAATATTT TnAAAATTTT 300
 GTGAGGATCC GCTTAAAAAA CCCCATA 327

5 (2) INFORMATION FOR SEQ ID NO: 1166:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 148 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1166:

TTAGGATTTT AAAAATATGT CAGGTTTTCT AACATAAAGC TTAAACATT GATATAACTG 60
 CGATTTTCGAC TTCTAAACG aCATrAAACA ATCTACAGCT AAAATATTTT TTCAATTTT 120
 20 AAAAATAATC nGATAAATCT CCGCAAAA 148

(2) INFORMATION FOR SEQ ID NO: 1167:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 243 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1167:

nAAGGTTATC GCTCGTAAAG ATGTTGTTGA AGAAGTATTT GACGACAGAG ATGAAGTGA 60
 35 TTTAAGTACA GCGCTTGTTA AAACCCTGCA TATGAAATTG GTGTATTACG AGAAGAGTAC 120
 ACTAAAGTTT TGGTCGTGTA GGTCTCAGCA GCGAACAGCA GTATGCACGT CTnCGTGTGC 180
 TGACGTGAAT TTTATTTGAG GATTATAGAC AAGAGAGACA ACTTACTGGA TTTTGCCCTG 240
 40 TTG 243

(2) INFORMATION FOR SEQ ID NO: 1168:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 321 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1168:

TTATATACTA CTATAAAGTA ATCCAATCT CAAGAAGTA AATGGGCAAT CAAAAGCTAA 60

CTACGATATG ACGCACAAAT GTTTAGGGTA GGTGTTGACA TGTGTACAAA AACCAGCAGA 180
 AAATGGTTGT ATTCTTAGGG AAGCATTCTAT CCTGTTTGTG TATGGATTCA TGTTACGTTA 240
 5 CGCAATATGT TTTTATGTAG CACAGCGAAG TTACAAGTTT ATACGCTATA TATCCnTTGA 300
 TnATAAGCAG ATGAAAnCGG C 321

(2) INFORMATION FOR SEQ ID NO: 1169:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 191 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1169:

20 TCTACATATA AAATTACTCT AAAAATATGT ATAGTCATAA ATTGTTGGTT GATTTAATTA 60
 AAAGTATGGA AATTAAGGGG CTCTTATGTA TATAAAAAA TGAATTATGA TAAAATGTAA 120
 GAnAATATTT AGGGTCGATT GGAGAGATAC CAGTGGTACC AATTAGAAGA CGACAGTTTA 180
 25 ATGTTACCAT A 191

(2) INFORMATION FOR SEQ ID NO: 1170:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 303 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1170:

AATGTGGCAA GGATGTGTGA TATGACTACA CATTTAATAT CATCCTACAT AATAATTTTG 60
 40 CGCGCCAAAT TATCACACAT ACCACACCTA CGATAACAAC CAGCAAATAA GGAGATAGCT 120
 ACACGTATTT ATCGTCCAAC GCACTACTAT ATGTTGTTGn ATGGGCACAA GTTACAAGTG 180
 CTGCGCGATA nCAAAAGGTA TACCCCTAAA ACGTCCCAAA AnAATCGGTT GCCCTCTAAA 240
 45 TTGTTTGTGT GCCATGATTA GTAAGCTCCT ATGTTAGAAA CAAATTTTTA ATATGTATAT 300
 TAG 303

(2) INFORMATION FOR SEQ ID NO: 1171:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 299 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1171:

5 AAAAAGGTGA GAAGACAATA ACGnACGCCA ACACTAAAAA ATCCATTAAC TGGAGAAATT 60
 ATTAGTAAAG GTGAATCGAA AGAAGAwATC ACAAAGATC CAGTTAATGA ATTAACAGAA 120
 TTCGGTGGCG AGAAAATACC GCAAGtCATA AAGATATCTT TGATCCAAAC TTACCAACAG 180
 10 ATCAAACGGA AAAAGTACCA GGTAACCAG GAATCAAGAA TCCAGACACA GGAAAAGTGA 240
 TCGAaGAGCC AGTGGATGAT GTGATTAAAC ACGGACCAA AACGGGTACA CCAGAAACA 299

(2) INFORMATION FOR SEQ ID NO: 1172:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 821 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1172:

25 CCATAGCACC ATACCCATAA CCAACCCGGA TCCACTAACA AATAAGTAAT AATTnACACG 60
 TAAAGAAGTA AATAGTTTGT TTAGTTTTTT ATCAACATTA TCAATGTTTT CCTCGACAGA 120
 CACTGGAATT TTAACGATAG CTGTACCATT TGTAATTGAG TAGTTCGTTA TTTCACCCAT 180
 30 ACTACTATTT GGTAAaATTG TTAATtCTCC TGAAATTGTA TTGATTCGTG TTGAACGAAG 240
 TCCAATTGAT TTAAGTGTTC CCTCTGCTAC AGTTGTACCA CCGTTATTTA TCTTAACATA 300
 35 ATCACCTACA TCAAAATGGC TTTCAAATAT AATAAGAAT CCTGTAAaTA CGTCTTTAAC 360
 TATAGTTTGA GCACCAAAAC CTACTGCTAA GCCTACGACA CCAGCACTGG CAATTACCCC 420
 TTCAACACTA ATGCCAAATT TACTTAAaAT CGTCGTAATA ACTATAAACC AAACGATATA 480
 40 CTTCACTACA TTTTGAACAA GAGATATTAA AGTTTTAGAG CGCTTTTTGT TACTCTTTTT 540
 ACTTTTATTT TGAATCTTAA ATCCCTGTTC AATCATTTTA TTCAGTATTT TAATAACTAT 600
 GAGGGCTACG ATAATATAAA TAACAATCAT AGCGATTTTA GTTGCAATGT TTTCATATGT 660
 45 TTCTATTTTT GTTAATGGCT CAAATAGAGA TGAAATAATA TTCATGACTT GATTCATGAT 720
 AAGCGTTACT CCCTTCTATA TGATATATCA ATATTGtATT CATATTTtga TATACTTCCC 780
 50 AACCTACGAA AGTCTCAATA TATCTAGAAT CAAATGGTCA C 821

(2) INFORMATION FOR SEQ ID NO: 1173:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1173:

5	CCCCGAAATTA AAATAATAAT GTATGAATTT TTAAATATGA TTAAACGTT TTCAGTTTTT	60
10	ATGAAAACGC ATGCATTTTA CAAATAAAAA TGGTACGATG GCACTGGTTA AAACGTTTTA	120
	CTAAAAACAA ATCATGAGGT GTATAACATG GCTGTCTCTT GATCAGATCT TGATCCCCTG	180
	CGCCATCAGA TCCTTGGCGG CAAGAAAGCC ATCCAGTTTA CTTTGCAGGG CTTCCCAACC	240
15	TTCCAGAGG nCGCCCCAGC TGGnCAATTC CGGTCGCTT GCTGTCCATA AAACGCCCCA	300
	GTCTAGCTAT CGCCATGT	318

(2) INFORMATION FOR SEQ ID NO: 1174:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 206 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1174:

30	GTTTTAAAGC GGTTATAAAG GTAAATATGC AATATTATAA ATATCTTCTT CAGAACTAAC	60
	CGAATCTCTT AAACATCATCT GTTTAGATAG CGTTTCAAAT TGATAAGTTT TAATTTTAAC	120
	CGTTACAGTT TTAGCTGACT GCTGTAATTT ATTGACGTG CAGCTGTTTT CCTGACAATn	180
35	CCATACTGTC TTAAAnCTCT GCATCA	206

(2) INFORMATION FOR SEQ ID NO: 1175:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 653 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1175:

	TCTGCATCAT GATATTTTAC ATCATCACTT ATAAGAACGT CACCTACATT TAAACTTTCA	60
50	TCTAAAGCTC CAGCAGAACC TGTATTAATA ATGACGTCCG GTTTAACTT ATTAATTAAT	120
	AATGTCGTAG AAATTGCAGC ATTAACTTTT CCAATGCCAC TTTGGGTAAT CACTACTTCT	180
	CTATCTTTTA AAATGCCAGT ATAAAATTTA ACATGTGCAA CTGaAATTC GCTTAATTGT	240

TTTTGATTCA CCTCTTTTAA AAAATCCTAG CATTGTGTAT TTTATCACAT TTTAATCACT 360
 ACAACGACAA GTATCATGAT TTTCATTACT GTATAAAACT TTGCTTTTAT TTTTATAAAA 420
 5 AGCTCTTTCA ATAAGTTGGT ATCATAAATA ATTATTTTTG AACTCATAAC AGTGAATTCG 480
 ATGCTTCTAA TTTGTCTATT TTTCAAAAAC TAATCATATC AATTACATCA ACCAATCGTG 540
 TCAAGAAACT TTATTAAATA ACAGGAAAAT GATATGTTTA AAATAATAAT GATGAAATAA 600
 10 GAGGATTTTA CAATGGCTGA AAATAATCAA AATAGTCTCG TAACAAAGAT AGC 653

(2) INFORMATION FOR SEQ ID NO: 1176:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 410 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1176:

ACATGGCCGT TnGnATCAAG ATCGTCAACG ATTGATTGGT ACAATTGAAG TGCCTATGAC 60
 25 ATTGGCAACC GTTGGCGGTG GTACAAAAGT ATTACCAATT TGCTAAAGCT TCATTAGAGC 120
 TACTAAATGT AGAGTCAGCA CAAGAATTAG GTCATGTAGT TGCTGCCGTT GGTTTAGCGC 180
 AAAACTTTGC AGCATGTCGC GCGCTTGTGT CAGAAGGTAT TCAACAAGGT CATATGAGTT 240
 30 TACAATATAA ATCATTAGCT ATCGTTGTAG GGGCAAAAGG TGATGAAATT GCTAAAGTAG 300
 tGAAGCTTgA AAAAAGAACC CCGTGCAAAT ACACAAGCAG CGGAACATAT TTTACAAGAA 360
 35 ATTAGACACA ATAGTAAAGG CGATAGCGAT TAAAGAAAGT TAAGTCAGTC 410

(2) INFORMATION FOR SEQ ID NO: 1177:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 146 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1177:

CATCAAGATA ACTACGGTTA TAATCCAAAC GACCCAACAT CATATAACTA TACTTACACT 60
 ATTGATGGCA CAAGGTAAGT ACCATTACAC ATGGGAAAGG TAACTnGCAT CCAAGTCAAT 120
 50 TAAACCAAGA TAATGGCTAC TACAGC 146

(2) INFORMATION FOR SEQ ID NO: 1178:

(A) LENGTH: 225 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1178:

10 TGTTCCTGGT GGAAC TTTGG TTTCTTAATG TCATTCCAAA TTGCTGTATA TTCATTCAAT 60
 GGTATTGAAC TTATAGGTGT ACTGCTGGTG AACGAAAGAT CTGAAAAAAC CTTACCGAAG 120
 CAATTAATAA TGTAATATCC GTATTTATAT CTATATCGTG GTATATAAT ATGTCATCAA 180
 15 CTGGATnTAC GTCAATAGAC CTTTCGTAACC TTAATATCGC GACAT 225

(2) INFORMATION FOR SEQ ID NO: 1179:

(i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 319 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1179:

TGTACGCATA TGGTATCACT TGATGACCAA TTCAC TTTGT CGAGAATAAC GTTATTTAAA 60
 30 GACATTGATT TAAAGAATTG GTATnCGTT AATTGTATTA GACTTTTCAC AGAAGTAGCG 120
 ACAACAATGA TTTATCGTA ACACGTGCGC ATATnAAGCA TGGGAAAAGA CATGGnCTAT 180
 TGACCTGGCC TTTGTGCAC TCGTACGATT GGTCAAACGT GGCTATATTG AAAGTTTGAA 240
 35 ACAAGATGCG ACGGACACAC ATGCACGGGT GGGGATAGAT CTTGAGTCTT ATTGAGACGC 300
 TGTGACTGTG GCTGACATC 319

(2) INFORMATION FOR SEQ ID NO: 1180:

40

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 654 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1180:

50 TTTTATCTTG GTTTGAACT AGATATGTGT AGTCAGGTAT AACATAATCA ATCCCTAATA 60
 AGTTATCATC AGGGAATTTG ATACCTGCAT CGATAATGAC AATTTCGTCT TTATACTCAA 120
 CTGCATAAGT ATTTTACCG ATTTACCTA GACCTCCAAG TGCATATACA CCTACTTCAT 180

55

TTCGTAATCT AAATGTGCGC CCTCTAATTT AGTGATAAAT TCGATATTAA AATTACGATC 300
 TTTCAAGTAA CGACGTAATT GTTCTTCTGT TTGAGCTTCA ACATAAAGTG ATTGTGTATT 360
 5 TTCACGCACA ATTACCTCGT CTCTGTTATG TTGATAaAAA ACTTTAAATA CTGCCATGTT 420
 AAAAATTCCT CCTAAGAATG TTTGTYTAAT TTATTGTTAA CCCTAGtAAA ATCGTATTGG 480
 AGTATATATC GATAAATCA TTCCAATCAT CTCTATAATG TAACTTAATA ACGATTGGT 540
 10 TAATAACTAG GTTCATCATG TCGTTCATTT TAAAAAATTA GTGAAATAAC ACTAAAATTT 600
 CAGTTAAATC TTATTTTACA TGATGAATGA TAATAAATAA AGCAGTTTAT CTCA 654

(2) INFORMATION FOR SEQ ID NO: 1181:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 231 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1181:

25 CGGGTATATT ATAGACAACG TTTAAGGACT TCTTTTTAAC TAACTTGTTA AATGTTGCTG 60
 TATTTTTGTA TTCAACACTG TAATATAGTT CTCTGACGC TGATGCATTA CTCATTGTAA 120
 TAGATATTAA AAGACTCAAT ATTATTAAaAC TAATAATAGC GCGCTTTATG ATTTTCATAT 180
 30 TCTAATCTCA AATGAATTCC AGAACTTTAT ATGGTTCAGG TGCGACAACA T 231

(2) INFORMATION FOR SEQ ID NO: 1182:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 245 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1182:

TAAGTTTATT AAGCTCTTGT CCGTTAGCAA TCACGCTACC GCTAGAAATT TGGTCAATTG 60
 45 AACTTAGTAC ATTTAATAAG GTTGTCTTAC CTGATCCAGA AGGCCCCATA ATCGCACGAA 120
 TTCGCCTTTT TGTATGTCAA GTAATATCTT AGGCTGAATG GTGCTTTACG AGTTTGAACA 180
 GTGCCGAAAA CGCAAGCCCC TTGATATCTT AAATGTGGAG ACTACAACnC ATCAGTGnCA 240
 50 CGGGA 245

(2) INFORMATION FOR SEQ ID NO: 1183:

(A) LENGTH: 490 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1183:

AGGTAAAGAT GATGGTGTAG AAGTTTATGT GCATTGCGAA GATCATGGCA TTGTATTTAA 60
 TGCAAGTCTA CCTTTGTACA AAGATGCCAT CCATCAAAAA GGATCAATGC GTAGTAATGA 120
 CAACGGTGAT GATATGAGTA TGATGGTGGG TACAGTGCTG AGTGGCTTTG AATATCGAGC 180
 GCAAAAAGAA AAGTATGATA ATTTATATAA ATTTTAAAAA GAAAATGAAA AGCAATATCA 240
 ATATACAGGT TTTACTAAAG AAGCAATTAA CAAGACGCAA AACGTCGGGT ATCAAAATGA 300
 ATATTTTAT ATTACATATT TATCAAGAAA TTTAAAAGAA TATAGAAAAT ATTACGAACC 360
 ATTGATACAT AATCAATGAT AAAGAGTTTA AAGAAGGTAT GCAACGAGCT AGAAGAGAGC 420
 TAACTATnG TGCTAATACA AATACTGTAG CAACGTTGTT TAGTACGAAT GATGAAAGGA 480
 ATAGAAAAGA 490

(2) INFORMATION FOR SEQ ID NO: 1184:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 153 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1184:

CTCGCATTTT AATAAATCAT ACTCTTCTTT TCTTGCATAC GAATTAGAAT AACTCGCGAG 60
 ACCTATAAGT CTCTTCCTC ACTAGATAGT TTATACTTTT GGTCnGTTGA AGTCAATAAT 120
 TTTATCTAAA GCTATAAAAA ATCTTTTGAT AGC 153

(2) INFORMATION FOR SEQ ID NO: 1185:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 164 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1185:

TCATTTATAT ACTGTATCAC GCTATCTTTA GTATGTGTGC ATnATCATTC GTTAGTGCCT 60

AATGAACGTT ATATTTTAAT TCATGATTTA CTAAGACCAA CAAT

164

(2) INFORMATION FOR SEQ ID NO: 1186:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 143 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1186:

CACAAGTGAC GTCATATTAT AAAAGTCACT CGGTTGCGA TACGTTCTGT CTAAGAAATA 60
 GCGACGTGCA ATTTTCATATT TTnTATAAAC ATCCGTTGAA AAAGGACATA AAACCATGCG 120
 TTGAACCAGG GTCTATACTT TCT 143

(2) INFORMATION FOR SEQ ID NO: 1187:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 209 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1187:

CGTACAAGTT AAAACGTTTA TACGATTACG AAAAACCACC GAAGAGTGAG AAAGATCCAA 60
 TGGTTGTATA TGCAGTAAGT GCAGGATACA AATGGTTCTT TGCTTATCCA GATGAACATA 120
 TAGAGACTGT TAATACATTA nCAATCCCTA AAGATGTCTG TTTATTAGCT CAGCATGAnC 180
 ATACAGTTCG GTCACATAGT GTCAATTCA 209

(2) INFORMATION FOR SEQ ID NO: 1188:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 243 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1188:

TTGGAATCGC TGTCGACGGA TAGCAACCTG GATTGTAAAA ATAATGTTGG CTTTAAAAAT 60
 ACCGTGGCAA TATTAAATGA ATAATCGCTG CTGAATATAC ACCCAATGCA CATTGAACTA 120
 ACATAAnCCC ATTTGACTCA TCTACGCCCA CTATTGGCTT TATAGTCACT GAACTAAGCT 180

TAT

243

(2) INFORMATION FOR SEQ ID NO: 1189:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 527 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1189:

CACCAGGCAT	TACCATACCA	GCACTCATAC	CACCAATCAC	KCTCGATAAC	ATCAATACCG	60
AAAAATTGTG	GCCAACTGCA	AACATAAATT	CTGACACTGA	AAACAAAATT	AATCCTATAC	120
ATATAATTAA	TTTCTTCCCT	AATTTGTCAG	CTAGCGTACC	ACCAAACGGC	GATATAATCA	180
TTTGAGATAA	CGCAAAGCA	GCAACTAGTA	ATCCTAAATC	ACTACCAGTT	AATCCCAAAT	240
CTTTTAAATA	AACAGGCAAG	ACTGGTATTA	CTAAACCGaT	ACCTAAAAAA	ATCAAGAAAA	300
TATTAAATA	TAAGACAAAA	ATCTGTTTAT	TCATATGCTC	ACCTCTTTTT	TCTCCATGTC	360
ATGCTTAAAG	CTGTTATTCT	TCTTTTCCAC	GACAGATTGC	AATTCATGCT	AAATATTCGT	420
AAAAAGTTTC	TATATTGTAT	TACAACATTG	CTACATTTGA	CAATATTTTt	TCTTTGTAAT	480
TATCACTATn	TTCCATTTAA	TTGTATAATT	AATGACATAT	TnnAATA		527

(2) INFORMATION FOR SEQ ID NO: 1190:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 889 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1190:

AAAACGTGGC	AGTAATTCAG	TGTATGTTCA	ATATGATGAT	ATTATGTTTT	TTGAATCATC	60
AACAAAATCT	CACAGACTCA	TTGCCCATTT	AGATAACCGT	CAAATTGAAT	TTTATGGTAA	120
TTTAAAAGAA	CTGAGTCAAT	TAGATGATCG	TTTCTTTAGA	TGTCATAATA	GCTTTGTCGT	180
CAATCGCCAT	AATATTGAAT	CTATAGATTG	GAAAGAGCGA	ATTGTCTATT	TTAAAAATAA	240
AGAACACTGC	TATGCATCGG	TGaGAAACGT	TAAAAAATA	TAATAAGATA	ATAAAGTCAG	300
TTAACGGCGT	ATTCAATTGT	AAATCTTGTT	GGATTTTAAC	AAGATAACTA	GCAAATGCAC	360
TGTATAGCTG	GCTTTTTAAT	TTTATTAACA	AAATTAAATA	TGACGCGTGA	ATTAAAAAAT	420

CTCTACAATC CTATGGCGCA ATTTTAAACA AAATATACTA AATTGAAAT TGACAGTTTC 540
CATAAATAAA ATGCTATAAT TTCCTACTCC GTGAATCTTA TTTTGTTTTA AAAACAGTG 600
5 TAGCACAGm TTCAACTTGT TTCCTACACT GTTTTATAAA TGAATTATTT AAAATGCTTG 660
TTCAACCTCT TGTAATGTTG GCAAACCTATT AATAGCACCA TACTTCGTTG TCACTATTGC 720
AGCAACGCGA TTGCTAAACG CTAAAATTTT CTCACCTTCA TTTTCAAATA ACTGAGTTAA 780
10 ATTTAACACA TCGGTTGCTA AAATCCTGCT AATAACTGCA CCAATAAATG CATCCCCTGC 840
CCCAGTTGTA TCAACAGGTT TTACCTTATA GCCACTATGA TAATGATTA 889

(2) INFORMATION FOR SEQ ID NO: 1191:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 254 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1191:

25 AGTTAAAGGC GTTGAATTAA TGGCCTTCCC ACACATGACA TATAACAAG CGTGCGCCTA 60
TGGTCTGATA ACCAGATACA CGTTTGAATG GATTAATTGC GTTCTCAATT AGGCGTGATA 120
TGGCTTTAAA GATTTHAGTC TGTTGAAATG ATGGTGAATT AAAGCATTGC GCTAAAGGTG 180
30 CACTGACAAT ATCTCGTAAA GATATGGTGC TTTAACAGAT TTGTAACATC TATGGTCTAA 240
NGATACGGGG TTAA 254

(2) INFORMATION FOR SEQ ID NO: 1192:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 189 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1192:

45 GGCTCATAAG TTACACCTAA TGCATCTTCA TCTGGAAGCT GTGGTTTATC ATCTTCTAAA 60
TCAGCAGTTG GCGTTTTTTC ATATAATTCC TTTGGCGCAC CAAGATACGC TAATAATTGA 120
GCTGTGTATH CTAGGCATCC ATACCGTATT CGTTAAACCA GTATATTTC GCTGAATGAT 180
50 CTGTCCTAC 189

(2) INFORMATION FOR SEQ ID NO: 1193:

- (A) LENGTH: 215 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1193:

TTGATATTGA TCGATGACCG GTGATGTGAA ACTGAACTG ACCAATGAAT GAAAAAATGG 60
 GCAATGTTTT TGACAACAAT GGTCAATTAC CAAATAAAAA TATTGnCAAC ATTAATACCT 120
 GnCAAACGTG TTTGTTCTTA AACCTAAAAT GATAAATCCT ATTGAGATTA TGGACTTGGT 180
 AAGCTGCAAT CTTTTTAATA TCTTTATAAG CAATG 215

(2) INFORMATION FOR SEQ ID NO: 1194:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1194:

AGAATTGChn ACTGGTTTAC CAACGCATCT ATGTTCCGTC GCTATACCGC ATACAGATGT 60
 CGAACATATT AACCATAGAA CGTAGGTGTG GTGTTCTAGA AAAAGAAGTG CCGTTATTGA 120
 AATGGGACAC TTGATCAACA GCCGAGTGAA ATCGTTTT 158

(2) INFORMATION FOR SEQ ID NO: 1195:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 180 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1195:

ACTGATTGCC GTGTCTGTGG TTGATCATTG ACTAATTGTT GGCCATCATT GGnTTCTTGG 60
 TCTAATAGTC CTCTTGCTCC TCGTCGTAA CATTGATGCC AATCATGCAC CACAGCCTTT 120
 CGGTTCACTA TAACATTTCT GCCAATGTCT CTACATGACA CGGGCTCATA TTTCTTTCTG 180

(2) INFORMATION FOR SEQ ID NO: 1196:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1196:

5 GTTAAAGCGA ATTATTCACA ATATAAAAAA TCATCTGATC AAGTCGTATT AGAATTAGGT 60
 ACAAATGGCG ACTTTACTGT CAAACAGCTC GACGATTTAC TTAATCAATT TGGaAAAGCC 120
 AAGATTTATT TAGTTAATAC ACGTGTTCa AGAaTTTmTG AGGgCAAATG TAAATCGATT 180
 10 ATTaGCTGAC GCGGgCGAAA CGGAAGTCCC AATGGTCACA TTAATTGGAT TGGGTATTAG 240
 GCGCTTCACA AGGGACCTTG GTGGAATATT TTTG 274

(2) INFORMATION FOR SEQ ID NO: 1197:

15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 154 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear
 20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1197:

25 ACGTAACCTA TATTCATCTC TGTTCCCAAT AATAATAACA ATACATAACT GATATTAGCT 60
 GTCTTTCATC TCTAATTAAT ATGCGTCATG AGCTAATATC GGTTATTTTT TTGTGTCAAA 120
 nAATTTTTAT TTTATCTCTC CATCGCATTa ATTG 154

(2) INFORMATION FOR SEQ ID NO: 1198:

30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 249 base pairs
 (B) TYPE: nucleic acid
 35 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1198:

40 AATCCTCACC CGTAATAAAC TCGTTTTGAA TCGGTTGTTC GAACTCACGG TATATTAAAG 60
 CAATATCCTC TAACTTATTT TTAGTTCGAG TTTGCATATT TTTATCAGCA ATAAAGTGTT 120
 45 CTAAATGTTT AGGCGTACT GCATATTTTT TAAATCTTG AATTGTCTCT GTTAATTTTT 180
 CACTAAACCC ATAATATTTT GCTTGTGATT GATAAAGTTT TAAATACTTT TGTTGTTCnT 240
 GAACAATGn 249

(2) INFORMATION FOR SEQ ID NO: 1199:

50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 165 base pairs
 55

- (C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1199:

TTGGTAAAAA TCGACATCAA ATACTAAATC TGATCCATCT GAATCCCATG TTTAAAACCG 60
 AACTTGTGCA TTAATTGTAA AGTTCAAACCT CTCATCTTC ATAGATCGCG ATGCGTCTTT 120
 TAATTCCTTA GGTGATACTT TGTAGATCTA TAACAAAATT AnCTA 165

(2) INFORMATION FOR SEQ ID NO: 1200:

15

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 236 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1200:

TTATTAGCGA TTAAAAATAT GTCCTTTTTT AATAAAGGAG ATATATGTTT AATTGGATGT 60
 CAACATCGGA GTCATTGGCG AAAAATAGGG CTGCGGTCGA TGGAGTTCAA AACTATTTTA 120
 ATGCATTACA TGTTGTGAGT nAAGAGCAGG CGTACTTTTC TTTCAAGGA TGTGACATAT 180
 CACAGAGCGT ACAATAGAAA CTCAGATACC ATTACATGGA nAGTCCGCGT CCAATG 236

(2) INFORMATION FOR SEQ ID NO: 1201:

35

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 146 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1201:

TAATGCTAAA CAGTATTATG GAGATAATGG CTTAGTTCAA ATTTCTGATG nAAGTCAACA 60
 CTTCTAAAAT TTGTAAATGA AGCATTAGAC AATAACGAAC AATCAGTTGA AGATTACAAA 120
 AATGGTAAAG GCAAAGCTAT GGGCTT 146

(2) INFORMATION FOR SEQ ID NO: 1202:

50

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 385 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1202:

ATTGATGATA GTATTGATGG TAATACCATA AACATACAGC ATTATCACAA GTAAAAGTAA 60
 5 GCCTAAATGT CCATAAAATC TACTTGTCAC AATATATGTC GGTATTATCG TAACGGGAAG 120
 TCATTTGTA CTGATTAAA CTTTGTGTA ATTGCTTTAG TACCTTCTAA ATACCTGGTT 180
 GATGAGACCA CATACTGATA CCACCATAAC CATAAACAAA AGGTACACCA GAATTGGGCA 240
 10 TACTTCTTAT TCCATCCAAA CCTCCGTAAC CTAATTGCTA CGGGTAATAT TCCAGCACAC 300
 TAATAGTATT GATGTAATTA ACTGAACGGC CGCTnGATAA TAAGTCTTAC AGTCTTAAAC 360
 15 GTCCATGCGC ATChTnACCC ATTCA 385

(2) INFORMATION FOR SEQ ID NO: 1203:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 580 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1203:

ACATTGAACG AGTACAGAAA ACTTATTGnA AATAAAGGCT GTTAAAGATA AAGAAGAAGA 60
 TACTTACAGA GGTAAGTATT TTGCGGAAGA AAGAAAAAC GAAAAATTGG AAAAAGAAAA 120
 30 TATAAACTA AAAACAAAA TTTATGAATT ACAAACGAA GAAGATAACG AGGAGGACGA 180
 AGAAGACAAG GAGGACGAGA ACGATGTATT ACAAATTGG TGAGATAAAA AACAAAATTA 240
 TAAGCTTTAA CGGGTTTGAA TTTAAAGTGT CTGTGATGAA GAGACATGAC GGTATCAGTA 300
 35 TACAAATCAA GGATATGAAT AATGTTCCAC TTAAATCGTT TCATGTCATA GATTTAAGCG 360
 AACTATATAT TGCGACGGAT GCAATGCGTG AyGTTATAAA CGAATGGATT GAAAATAACA 420
 40 CAGATGAACA GGACAACTA ATTAACCTAG TCATGAAATG GTAGGAGGTA TGAnAAGTGA 480
 ATGATTTACA AGAGAGAGAA TTAGAAACAT TCGAACAGA CGACCGATTG AAAGTAACTG 540
 ATCTAGACAG TGCTAACTGG GTTTTTTnAG AAACnGGAT 580

(2) INFORMATION FOR SEQ ID NO: 1204:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 139 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

ATCGTATGGT TGAGGCGAAT TTAAGTGAAG AATTAGACAA CGAATCTTGA TGAAAAGAA 60
 ATGATTGGCT AAAATAGCAG CTAATCAAAT CAACGATAAT GAATGCTTAT TTATCGTGCT 120
 5 GGTTTCATCTA CATTGGAGC 139

(2) INFORMATION FOR SEQ ID NO: 1205:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1205:

AGGAGGATAT CAGaCTTACA rACTATTCTT TATCATACTG rAATTCAAAT AGACACCTTA 60
 20 ATTGaAGaAG GCGTTGACGC GCTACTTTTC rAAACGTATT ACGACCTnGG AAGnGTTAAC 120
 AAATGTCATT TCCACGGAAC GGGGAAAGGA AATACGGCGT TGCCAATCCA TTGCTCCAAT 180
 TGAACCGGTT GCAAACACAA ATTGACTTGG TTGAAGGGGC AGGCATGCA 229

(2) INFORMATION FOR SEQ ID NO: 1206:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1206:

TCGACAAGTT TTTAACAGTT CGTTATTATA TGAATGTAAG TAAAAATTC TTAGCTACAA 60
 CTTACATATT ATAAATGCAT AAATTAAACA AAAAGGGGCG AAAAAAGTTG ACTCATTAT 120
 40 CAGATTTAGA TATTGCGAAT CAATCAACAC TACAACCAAT TAAGGATATT GCTGCATCAG 180
 TAGGTATTTT AGAGGATGCA TTAGAACCTT ATGGTCATTA CAAAGCTAAA ATCGACATTA 240
 ATTAAAATTa CGCCAAGAGa AAACAAAGGG AAgTTGTTTT aGTTAACTGc GATGaGCCCCA 300
 45 ACACCAGCTG GTGaAGGtAA tCmACGGTTA CAGTTGGtTT AGCTGaTGcA TTCCmTGaGT 360
 TaATgAAAAC GTTATGGTTG ccTTaGGGGG CCTGCCTTT 399

(2) INFORMATION FOR SEQ ID NO: 1207:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 138 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1207:

ATAACAATA CGATTGTAT GCTACTGTC TGAAGACAAC ATAAAACAAT ATGTTAACTG 60
 5 ATATTGAGGA TATGGGCTTT CAAAATCCan TTCAAAAAAG GTTATGTTGA AATATGACGC 120
 GGTTGTTGAA AGAGACCC 138

(2) INFORMATION FOR SEQ ID NO: 1208:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 655 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1208:

AGTCGCCTAA CTTTTATTAT CAGTCCAATC AGTTTCATCA AGTATAAATG TTATTGCTTA 60
 20 TTTTGTATT CTGGCGTAT TTTTGTTCT TCTGCATAGC GCTCTGGATT TTTCTTATAA 120
 AAATCTTGGT GATAGTCTTC GGCTTTGTAA AATTGTGACG CTGGTAATAT TTTTGTGCA 180
 25 ATTGCCTTAT CAGCATTAAAT CGTATTTTTA AGCTGCTCGA TATAAGTCTC AGCGAGTTCT 240
 TTTTGATGAT CATTAGTGTA GAAAATAGCT GTTtNATATT GAGGACCACG GTCTTGATAT 300
 TGACCACCTG TATCTAATGG GTCAATGACT GAGAAAAATA TTTCTAATAA CTTATTGTAT 360
 30 GAGAATAATG CAACATCATA TTGAATTTCA ACAGTTTCTA AATGACCACT CGTACCTGAT 420
 TTTACTTGTT CGTAAGTAGG ATTTTCAATA TGTCGCCCA TATATCCAGA AGTTACTTTT 480
 TCTATGCCGT CAAAGGTGTC AAATGGTTTC GTCATACACC AAAAGCAACC TCCGGCAAAA 540
 35 TAAGCTGTAT TAATATTCAT TTTTGACATC CTTTCCATTA GACCTTAGTA CGATTTATTA 600
 AGAAATCACT TGCTTTTTGA ATTGTTTTTA TATAACGTTA ATAnGnGATT ATnAT 655

(2) INFORMATION FOR SEQ ID NO: 1209:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 213 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1209:

CCGnCCCCAA TGGAAATTAC CTTTGGTnCC CCATTTTAAT TGTAAATTA TTGGAGTGTT 60

AATCTCACTA TCTTCAAATA AGCTTGTGTA TAGTTTAACA GCTTCTTCAG CTTGGTTATT 180

AAACATTAAA AATGTCGTGA TTTTGGGAAT ATC 213

(2) INFORMATION FOR SEQ ID NO: 1210:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 149 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1210:

TTGATTGCAA CTTTGATAGT GAAAACATTT ACATGATGTT GTCACTGGTG CACGGGCGTC 60

GAGAACAATC ATTGCGTTAT TGACGGTGCT GCCCTGCTGT CTCAGTTTGT TGATGCAAGC 120

ACTACACGAA ACCCAATAGC nTCACCAGG 149

(2) INFORMATION FOR SEQ ID NO: 1211:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 142 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1211:

AATGTTTCTC CTAATTTTAA ATGTTTAGGA ATATTAAC TA GGATAATAAA TCCAGCGACA 60

TCCCAAATGG GATTCATATA AGAATGTTGG ATGATAATnT TGGCCGTTAA TATACATATT 120

TTCTATTATA AAATTGGGCA AA 142

(2) INFORMATION FOR SEQ ID NO: 1212:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 163 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1212:

TTTAAATT TA GTCACCTCAC CTTTAAAGC ATGTTTCATAA AATGTTTGCA TCATCAATGC 60

ACGTTCTGAA CCAGAGCCTT CAACACAAAG ATAAATTTGT ACAGCAATAC CGCCTCTAAC 120

TCTTCGTTGC GATGATGGCA ATACCACTCA ATCCAACGCT CnG 163

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 765 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1213:

GTCACCTTTC ACGTCTTGAA GAAAAAGGCT ATATAAGAAG AGATCCAACG AAACCACGTG 60
 CTATAGAAAT TGTAAGTGAT CAAACAAATG ATAATATTAA TATGGAAGAA ACGATTCATG 120
 TGCCAGTTAT TGGTAAAGTC ACAGCAGGTG TTCCTATTAC CGCAGTAGAA AATATTGAAG 180
 AATATTTTCC ATTACCTGAA CACTTAACAT CGACACACAA TAGCGACATA TTCATATTAA 240
 ACGTCGTAGG CGACAGTATG ATTGAGGCTG GTATATTAGA CGGAGACAAA GTAATTGTnC 300
 GCAGTCAAAC CATAGCAGAA AATGGAGACA TTATTGTTGC TATGACTGAG GAAGATGAAG 360
 CAACTGTCAA ACGCTTCTAT AAAGAAAAAA ATCGTTATCG ATTACAACCT GAAAATAGTA 420
 CAATGGAGCC AATTTACCTA GACAATGTTG CTGTAATTGG GaaAGTAATT GGTtTGtACC 480
 GCGAAATGTA ATATTTTAAA CCGTTATATA TTATCGTAAT TGTTAAGCCC TCATTTTtAT 540
 AAATTTTGGG nCTCTTGAAA AAGTTACGTT TTCAAGAGGT TTTATTTATT CTAATCTAAA 600
 TTCAGTTCAA ACAGAAATTG CGAATTGTTA GATAATCTCA TTCTTTA-TA TAAATnTTGA 660
 ATTACAGATT TCTGCAAAAT GTTACACAAA TTAAACTCG CCCCCGTAAT AATTTACAGG 720
 AGCGAGCCAT TATTATTTTT TTCTTTCTTT TTTATTAAGT ATATC 765

(2) INFORMATION FOR SEQ ID NO: 1214:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 495 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1214:

AGTTGCCATC AAAAATACAG AACCTAATnA TnACCTTTTA TGATTTTTTG TGAATTCAAA 60
 GTCACTTTCT TTTTnAAGCT TTAAATTTCT CCCCATTTTT TTAGCCCCCT ATAAGGATTG 120
 AATATCAATG CCTTCTTTCA TTAAATTTTC TCTAATTTTC GAAACAAATA ATAATGCATG 180
 TTCTCCATCA CCATGCACAC AAATTGTATC TGCTTGTAAC GTTACTTCCT TATTGTTTTT 240
 TGAAATAACT TTATyyyCct TCACCATCTT TAAACCTGC TTAAGTGCTT CGTCAGTATC 300

ATCAGCAAAC ACTTCAGAAG CTGTAATTAA TCCGACATTC TTTGCTTCTG AAATTAGATA 420
 TGAATTTGCT AATCCTACTA ACACTAGTGA TGGATCAAAG TCATAAACAG CTTGTGCTAT 480
 5 AACGTTTGCh ATTnC 495

(2) INFORMATION FOR SEQ ID NO: 1215:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1215:

AnTGTCAGG TACCCGTGGT CCAAATTTCG ATGTACGTAG ACCATTGnCT CGTATTTGTC 60
 20 AGATTGTGTT AATGATTGTC TCTGTATTAG GAAGTTTATT CTCCATTTTA ACAATTAGAA 120
 AAATAGATCC GTTAAAGGCG ATTGGGTAGG AGGTGTGCAA ATGTTGAAAT TGAAATGTAC 180
 AAGTCATTAA GTGGATCTAC ATGAGCGTAA GGTCAATTGA ATAGGTTTGC TGTGACTCGC 240
 25 CGA 243

(2) INFORMATION FOR SEQ ID NO: 1216:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1216:

GGGCTTCTTT CTAAAATAAC TAAGTGAATT ATCTATATAT GAAGAGGTCT CCAATACTTT 60
 40 TTATATAATT CGTGATTACA TTCTATACTT TTAATTGTAT TTTCTGCGTA GGAAAGTGGT 120
 TTTATTAATT CGATTAGTTC GAAC TACAnT CAAGAAAAGG TAAAATTTGT GCATGAGCAA 180
 GAGAAACATA CCTGAACCAA AGGCACCCGA ACAGTACCTA GGCCTAAGCG GCTAATTATA 240
 45 AATGCTCAAG CGCAnG 256

(2) INFORMATION FOR SEQ ID NO: 1217:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1217:

5 TTTATTTTTT CTTCTAAACG AACATTGCT TCTTTTGTG ATTGTTTTGT ATTCTTGTTT 60
 AACACAACAC TTACGCGCTT CCATTTATCT GTGTATGGAT CTTTATACTT CTCGTAGTAT 120
 CTGTATTTAG TTTCGTTATT TTTGTTTTTA AATTTTCAA TCCACATGTT TATACCTCCT 180
 10 GAGAGAACGT ACGTTCTGTA AATTGTAAA AAATAATAAG GGTAGGTGGG CTACCCAAAA 240
 TTTAGTACTA GGTACTAAAT ATGTTATAAT AAAATAAAAA GTAGGTGATA AGATGACTCA 300
 ATTTCTAGGG GCGCTTCTTC TTACAGGAGT TTTAGGTAC ATACCATATA AATATCTAAC 360
 15 AATGATAGGT TTAGTTAGTG AAAAAACAA GATTATCAAT 400

(2) INFORMATION FOR SEQ ID NO: 1218:

(i) SEQUENCE CHARACTERISTICS:

- 20 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1218:

25 CCAAGTGTC ATTTTAGATG ATTTTTTGT TGACCTATCG CCTTAACTGA AGAAACTGAT 60
 30 AAATCATCCA TTTCAAAAAT AGGTCTAGAA AAATCTGTTT CGAAGGCTT AAACGATTCA 120
 TATCACGAAT ATTTTAAATC GTTATATCAT TTTCTGTAA TAATACATCT ACTTGCTTTA 180
 CGGGATCTAA CGAAGTTGTT TTAGATAATT CTTTCATCCA TTTATTTAAA CCTTCAGCTA 240
 35 ACGATTCTAT ATTTTCAATA TCCATCGTCA TACCTGCAGC CATATGATGG CCGCCAAAT 300
 TAGCGATTAA CTCTTGATGT GCTGATAGTA TTTCAAACAT CGACACTGA TCAATTGATC 360
 40 TGGCGGAGCT TTTGCATGAT TTTGCTCCCT ATCAATATTT 400

(2) INFORMATION FOR SEQ ID NO: 1219:

(i) SEQUENCE CHARACTERISTICS:

- 45 (A) LENGTH: 458 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1219:

50 AAGATATTAG ACATAAAATC TAAANACAGC AGTAAGATGA TTTATGATTA GAAACTATCT 60
 55 TACTGCTGTT CACTTTTTAT AATACTTCTG AATGTCTTCA CTTATACTTC TAGTCACAGA 120

GCATTCATTT CTTGTcTAGC AACGTTCTAC TCTAGCGGAA nTAAtTAGCT ACCATCCTCG 240
 CTAAGAACCT TTCTTGACTT GTGACAATCG CTTGCTTCTT TCCTCTCCTT CGGcTCTCGC 300
 5 TTAATCATT AGCTCTACTA AACTCGTTGC GCTCTTTTCT CGTTTCGTCA GATTCAAACG 360
 TTTTCACTTC GCCAAGCCAT TTTCTTTGT GTTTACTTTT TATTTTGACG TTTTAGACAT 420
 10 AAAAAAAGAG ACCTCACGGT CTCAACTTGG CCTGGGCA 458

(2) INFORMATION FOR SEQ ID NO: 1220:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 494 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1220:

CAAAATTTAT TTCTTGTAAG GTACAATATA AGTTAAATGT TGTGTTAGG ATTGATTCTT 60
 25 TCATCTGAGC ATTTAATTGT AAGTCGCTAT ATTTAATTGT TTCAGTATTT AmAAATAAAT 120
 TGAAAAATTC AACTGATAAT AAAGGTGTTT TAATCATACA AATACTTGAC GGTTCGTAAA 180
 TAGTGTTTAT TTGTAAGCAC CTCACATATT TGAATAGACA AATAGAGCCC TTTCAGGCTC 240
 30 TATTTGCTGT AATCTTAACA GCAGAAGCTA TTAAACTAC CAGTCTTAGC ACAACCAGGA 300
 GTACATAAAC TATGACTTGT AATACGTTTC TCACCTGCTG AATCATTTGA GThATTGTTT 360
 GCTTTAACTT GCACGTCTAA ATCAAGAACT TTTTCCATAG ATAAAACCTC CTATTATTAG 420
 35 TTGAAGTTAA GGCCTACTTC AATTGTCATA TTATCCCTTT TCACACAACA AATCAATAAA 480
 TTATATAATT ATAT 494

(2) INFORMATION FOR SEQ ID NO: 1221:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 148 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1221:

ACTATTATTT TAATAGTGAC GACAGTTTTA ATTTTATTAA GTATTGCTTT AATTACCTTT 60
 ATGCAATACT ATTTACACA AGAnACCGAA AATGCCATAA GAGAAGATGC TAGACGTATA 120
 55 AGTTCACCTG TCGAACAATC ACATAATA 148

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 401 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1222:

TCGCTTTTAC ATCAAATAAA TTATCTTTAT ACAATTTTCGT ATGAATTACT TCTTTATAAT 60
 TATAAAAATG AGGAATTTTT TGATTGTTTA ATCACTTGC TAATTGATTA GCTTTTTGTT 120
 GGTCTTTAAT TGTAACGTCG TGTGGTGCG TATATTTTAT TTCACTTGAT AAGGACGCTC 180
 TACTTATAGC AGCAAAGCAA AGAACTGAAA CAGTAATCGC TGAAATGATT GCCATGACCG 240
 TAAGTGAAAA AGCATTTTTC TTAATACGAT ACATAATAGA TGATGAGAAC ATGACATCAT 300
 TTACACTTAT AACACCTTkt CTAAACtTCT TCACCATTTT AAAAAGTAGA GARACAGAGC 360
 TTTTAAAAAA TAAGnGTGCC CCAATCACAG TTGACAAnAA A 401

(2) INFORMATION FOR SEQ ID NO: 1223:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 176 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1223:

CTTGACCAAA TCCATTTTTT AACAAAAGTG GTCAAGTGAA ATCCCATCTT TCCAAATCAA 60
 AAAAGAGCTA AAGCAAAATG CTCTAGCCCT TGATATTACT GATTTCCTAT CATTGtntAG 120
 CGTATTAATA TTGCTTCATG TACTGATCTC TTTCCCATTC AGAGACTTGA GTTCTG 176

(2) INFORMATION FOR SEQ ID NO: 1224:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 283 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1224:

AATACTTTTA CGATAATTAT AAAGGTTTCA TCAAATCTTA GGGCAAAATG TATAATATTT 60
 TTATGCAAAT TTAACAAnt AACACTTATT TCAAGGTTCA ATATTTTGAG AATAAGGAGT 120

AATGCCAATC AAACCTCGCTC GAAATAGGGG GAAACGAGGC nATCATTTTT GACAATGAGT 240
 GTCAATAGGG AAGAATAACA ATTAGGAATG ACTCATAGGA GGA 283

(2) INFORMATION FOR SEQ ID NO: 1225:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 217 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1225:

AAAAGAAGAG AAGAAAGTTG AAGAACCTCA AGCACCTAAA GTTGATAACC AACAGAGGT 60
 TAAACTACG GCTGGTAAAG CTGAAGAAAC AACACAACCA GTTGCACAAC CATTAGTAAA 120
 ATTCCACAGG CCATTACAGG AATTTAAGTC GGATACCAGG TGAATnACGT CAGGATGTCh 180
 GCCGTTTACA TGACACGCTC TACATATTCA CCACTCG 217

(2) INFORMATION FOR SEQ ID NO: 1226:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 176 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1226:

TGGGTACTAT TTATTACGTA AAACTTTTCG TTAGCGATGC CGGCATTGCA AGAGCAAGGT 60
 TTACAAAAGC GGACTAGGTT TGCACITTTCT GCTGTTCCAT CGCATATGGA TTAGTAAGGT 120
 CTTTATGGGn ACTGTAAGTG ATCCGAGCAA TGTCGGATAA TCTAGGTCTT GGATAG 176

(2) INFORMATION FOR SEQ ID NO: 1227:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1227:

AATGAAAATA AAGAAGATGA TTTTGTGCA TATGGGTCTC CAGAACATAA TTATCAATTT 60
 GGTGGAAGTT TAATCAAAAAG TAAAAATTTA AGCACGTTAT TAAAACCACT ACATCAAACC 120

GCGGCCGTTT TAATTTTGTT TTCAAGTTAA TCATACTTAC ATATAAAAAT GAAAAGTTGA 240
 ATTTTITAGTA CAATTTCCAC TGTATTTATC TGTTAACCAC TTTATACCCG CAATATTTTCG 300
 5 TTGATCTTAT ATAAACACTT TTGGCTGCTT TTCCTTGACC TAGATTAAAA TTATAGATTT 360
 TCCTTGTAAG AGTGTGTTT TAGTATCATA AATATGTAAA 400

(2) INFORMATION FOR SEQ ID NO: 1228:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 150 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1228:

20 ATCTAGCATG CTTTGGAAA ACGATAAGAA TTTGGTGTTC GAATTCATA ACCAACACCA 60
 GCAGTTTCAA CAACTACGTG TGTAGGATAT AAATGTGTTA CTTGACCTTT GACATACGCG 120
 TACATTATAG GCACATCCTT ACATACTCAN 150

(2) INFORMATION FOR SEQ ID NO: 1229:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 138 base pairs
 30 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1229:

35 TCGGTACAGT GCATTGGTG CGTCATGGTT TACAAGGnAA AAATAAGTGA TCACTATTTA 60
 TCAGTATGGG AAAAAGCAAC GACGTATCAA ATGTACCATG GCTTAGCATT ATTAATTATA 120
 40 GGTGTAATTA GTGGTACA 138

(2) INFORMATION FOR SEQ ID NO: 1230:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 182 base pairs
 45 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1230:

55 TTGGTATGTA CCTCCAATAG TAATTTCAAT AACTTTGTCT GTTGAACACT AAGAGCAATT 60

CCTTGATTAT nCTAAGAAAA GTAAAAGCAC ACGGAGTATC CTATCAGAAA ACCAGTATAC 180

CA 182

(2) INFORMATION FOR SEQ ID NO: 1231:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1231:

TCTCTTTAAA TTGTACACAA TTCTGGATAA CTATCCCCAT TTCTGTGGAT AAACACCTTG 60

ATGTCTTATT ACTTATCCTC GTTTTATAT CCCATATTTA TCAACGGkTA TCGCTTTTTT 120

TCATAAAAAA aCACTACCGT ACCyCTTATT TAAGAAATAC AGTAGTATTA TTTTCAATAT 180

ATTTTAGCTA GChTTTCTAC GTCGTACAGT CGCGATTAAA CCTATACCTG CTA 233

(2) INFORMATION FOR SEQ ID NO: 1232:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1232:

GTTTTTGgTA AAAGTACTAA TATTaCCAA GTATTGAGTC ATATGTtAAA ACAAGATGCG 60

AATGATATTG GCTTTGCTAA ATTACTACAA AATGAGAATA ATCGTATGAG TTATAACGAG 120

TTAATGAGTG AATGGCAATC ACATCAACGT GCATTTTTAG AAGAGTTGAG GCATGTTGAA 180

ATGTTAAAAG AAGAATCTAT TAGAGCATAT GATGTTTATA AAAATTGTGA GTCITTCTCT 240

AAGATTGAAC AGGTTATTAA TAGTGAAAAA ACAAGTATTG AAGAACAGGT ATATCATTTA 300

GATAATGAAA CGTTACGAGA CAATAAAGAA ATAGAAGTTT GGGATAATCG ATTTAATTAn 360

ATTGnTAGCC CAATGGnCCC TTtAA 385

(2) INFORMATION FOR SEQ ID NO: 1233:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 180 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1233:

CTGAAAAGAT TCAACTAATC TGAGTCAGGT TACAATCTCA TGATAACCGC TCGCACCTCG 60
 5 GAGAAAGACG CTCAAACAGT ACAGAGCTCG ACCGCAGGAT ATTTTTTGTG AAAATGAACG 120
 TATGAGCTGT TCAGAnGGCA CTTTATTGCG CAATAAAACG GTAAAAATCC TGAAGTGAAG 180

(2) INFORMATION FOR SEQ ID NO: 1234:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 453 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1234:

ACCATTTTAA TTTnChTTAT GACCTTGTAT GCCATTATCA aCAGTTATGA TTAATGTTAT 60
 GCyTTCATCA TGAGCATTTC TAAATGCTAG TTCGTTTGGT CCATATCTTC GGTAAAGCGG 120
 TTAGGAATAT GCCATCCTAC TTGTGCACCT AAAAGTTGTA ATGTTATCAC TAAAATTGTA 180
 25 GTTGCGGTAA CACCGTCGGC ATCGTAATCA CCATAAACTA GGATTTTCTC ATCATTGCGT 240
 ATCGCTCTTT TAATTCCTTC AATAGTCTTA GTCATATCGC TCAATTGnAG TGCATCATGA 300
 TTGATATCTG TATCTGAAAT GATGGATTCT ATTGCTTGTh CATCAATAAT CGATTTACTT 360
 30 nCTAATATTT TTTTACGAT TGGCGTTAAC TTTAATTTTG ATGTTAATTC ATCACTTATG 420
 TATTCAGCTG GTTTAGTTAA TTTCCACTTA TAC 453

(2) INFORMATION FOR SEQ ID NO: 1235:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 163 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1235:

CGTGATTAAG TTGGATACTA AAATTTGGGA TGTTAGAGAA TGTGATGAAG ATTTnCAGCA 60
 ATGTCCTGAA ATTAATGAAA TAAGAGACAT TGTTTTAAAG CGGTGGTTTG ATAGGTTTAC 120
 50 CAACTGAAGC AGTTTATGGA CTTGCAGCGA ATGCGGCAGA TGA 163

(2) INFORMATION FOR SEQ ID NO: 1236:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1236:

GTAAACACAT CGCTTATAAC GTGTAAATAT AAACACTGTT TTATAAAAAC TTTTATACC 60
ATTACCGGCA CCGATAAATG TGTACTATGG AGCACAACAA TAACTGGAAT ACTTnGATTT 120
AATCCCGCTA TAACATTTCC TAAT 144

(2) INFORMATION FOR SEQ ID NO: 1237:

15

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 204 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1237:

ATAGTTTAAG GTGATATTCA AACAATATTA GGTtTGATTT AACTATCAAG CATCTACTTT 60
GTCATGTTTA ATACCAGCAA ATAATAAAT CCATGTCACG ATAATAAATG GCATGTTAAT 120
GCAGGGTAAG CCCAACCGGT CCAGCCATGG TGGTGGTACC CTAnTTGGCC nCCACCTACC 180
GGTTAATTAA CCACCCCCAA AAAA 204

(2) INFORMATION FOR SEQ ID NO: 1238:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 157 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

35

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1238:

CGGTCATTTT GGTtATTnAA CAACTATACC TGAGGGGTGG TGGGTAAATC GTATTGCCGA 60
TTCAGTTTTG TTAATATGCT GACCACCTGC ACCAGAAGCT CTGAATGTAT CAACTGTGAA 120
TAGCATCCGG ATTGGTTTCA ATCTGCTATG GCATCAT 157

(2) INFORMATION FOR SEQ ID NO: 1239:

50

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 164 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1239:

TTAAAGCATG TTCATAAATG TTTGCATCAT CATGCACGTT CTGGACCGAG CCTTCAnCAC 60
 5 AAGGTAATTT GTACAGCATA CCGGCTCTAA CTCTTCGTTG CGTATGCCTG CAATTTCTTA 120
 CCTCGATACT TAAGTCAATT TTCCGGGCAT AAGGGTGTTC ATTT 164

(2) INFORMATION FOR SEQ ID NO: 1240:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1240:

TTGAAAAACT GAAAACGGTG AAGTTTTACA AACAACTAAA ACAGATAAAG ATGGTAAATA 60
 TCAATTTACT GGATTAGAAA ATGGAACCTA TAAAGTTGAA TTGAAACACC ATCAGTTACA 120
 CACCACACAA GTAGTTCAGA ACTATAAGTT GATCAATGTC TCACACAGTG CATAATnGAA 180
 25 CAACATGCCG GTCTCAACAC TCACTAGGCA GAGGATCATA ACGGTCGTnG TAAGCTCGG 239

(2) INFORMATION FOR SEQ ID NO: 1241:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 152 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1241:

TGATAAATAA TAGCGCCATC ATAAGTTGCA GGGTGTAAT CATAATTTCT ACCATGAGTC 60
 40 TTTGCCTTGA AAGACCGTGC ACCACTTTCT TTAAATCGG TAAACGATAA TGnCAAGTTT 120
 AAAATAATTT GCGGTGTTGG CATTGAGTA TC 152

(2) INFORMATION FOR SEQ ID NO: 1242:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 148 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1242:

ATCTTTACCT TTCACTGTTC ACTTATGTAC CATAATACTT CTGACAGTTA CTAATTAACA 120
GCAACTCTAA CTCATTTATA TTAACTA 148

(2) INFORMATION FOR SEQ ID NO: 1243:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 588 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1243:

GGTACCAATC GATCGTTACA AACGTTTCGT TAAAGACGAT AAAAAAGTAC CAACAGGCAA 60
TGAATATCGT GAATTAGTAT TAAAAGCAAT TCACATGATT ATGCTTGGTT TCTTGATAA 120
ATATATTGTT GCTTACTTTA TTAACACATA TGCAATCATG CCGTTACAAT TAGACTTACA 180
TGGCTTTGTC AATTTGTGGT TATATATGTA CGCATACAGC TTATATTTAT TCTTTGACTT 240
TGCAGGTTAT AGTTTATTTG CGATAGCATT TAGTTATTTA TTCGGTATTA AAACACCACC 300
AAACTTCGAT AAACCTTTCA AAGCGAAAAA TATTAAAGAT TTCTGGAATA GATGGCATAT 360
GACATTATCA TTCTGGTTCA GAGATTGTAT TTACATGAGA TCTTTATTCT ACATGTCTCG 420
TAAAAAATTA TTGAAGAGTC AATTGCAAT GTCCAACGTG GCATTCTTAA TCAACTTCTT 480
CATAATGGGG ATTTGGGCAT GGGAACGAAG TGTAATACCA TTGGTTTAAG GGGTTAAACC 540
ATGGCCAGCC TTGGTTAAAG GGTAnGGnCC AATAAGGACG GTGGGCGG 588

(2) INFORMATION FOR SEQ ID NO: 1244:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1244:

ATTGCTGGAG AAAGGCAAGG CTTTGCAGGC GGATTGAACT CGACATTCAC TAGTATGGGT 60
AATTTCATAG GTCCTTTAAT CGCAGGTGCG TTATTTGATG TACACATTGA AGCACCAATT 120
TATATGGCTA TAGGTGTTTC ATTAGCAGGT GTTGTATTG TTTTAATTGA AAAGCAACAT 180
AGAGCAAAAT TGAAAGAACA AAATATGTAG CATAAGTATT TTGGTGTATA TTGATATAAA 240
GTAAAGCGTA ATATTATGAA TGATTAGCAT CGTTTTTCTT ATGAATTTTA TTAAGAAAAT 300

GTTATATGTh ACAAAA

376

(2) INFORMATION FOR SEQ ID NO: 1245:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 288 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1245:

15	CAATTTGTTT TAAAGCAAAT TCTTTACATT TCTCACGGAA TTCAGCTGTT GACATTTTCT	60
	TTCGGTCAAC ACCTTTTTTC GTTAATGGCT TGTTCAATTG GGTAACCAT GTGGTTATCC	120
	CCCAACCTGG GTACCGTATG GGTGGCCAT TAGGAAACCC CTTGGCAATA GGTTTTTTAA	180
20	TAAACCGGTA nCAAATTAAA AGGTCCTTTT TTAAAAAATT TTTGGTTTCC AAAGGGGCCA	240
	ATGGnTCCCC CAATTAATGG TTAAAGGTTT TAACCCCAAT TTTCCGGC	288

(2) INFORMATION FOR SEQ ID NO: 1246:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 161 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1246:

35	CATCATCAAT AGAACGGTAT TCGCAACGTC GTAGAAATCC CTAAACGAC GAGAACAAAG	60
	CAAGTCGACA TCAGTAAAC ATTAAGATA TTATGGCTGA AGCAGAGAAC TTAATAACTT	120
	TTTATAAATC TATACnTCC AAAATGTAA ACTACAAAA T	161

(2) INFORMATION FOR SEQ ID NO: 1247:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 421 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1247:

50	TCACTACGTT GTTTAATTGT GGTAATTGCA GTTTTACAGG CTTGTCTAGT GAAGATTTAA	60
	AACTTAATTC AAGTGTTTGA GTCATGAATA TGTCCTCTG ATTAAATTGA TAAAGATTG	120

TTAATTTGGT CGTTTGATGC ATCAGGGTTA ATGTTAGCGA ATCGACGCTT AAATTCTGTT 240
 TGTITGCCGT TAGCGTctAC TTTAGTAAAT GaTAATACAA TAGTGATGTG GTTTATTTtA 300
 CTCATATTTT AAAACCTCCT TTCACACTAT ATATCGAAAC AAAATAATAA AATGGCTAAT 360
 TTTATTTTCT ATGTTTAAAA TCTATAAAAn AGGCAATAGA TATGTGTAAC TAAAATATAn 420
 G 421

(2) INFORMATION FOR SEQ ID NO: 1248:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1248:

ATAAGCTGCT GTTGATAATC CAAGTGCTAA AGTTAAATAT AATATAGTGC CAAAATTTT 60
 ATTCTTCTAT AAAAACACCT CTCATATTT AATCCATATC TCTTTTTCGT TATTTATACA 120
 GAATTTTCTG AAAATAGTCA AGGTTAATTT ATTTGCTGCA AATTTCAACC ACTTTATGTT 180
 AAATGGACAT CAAAGTATAA TTGTATTATT ATTAAATTGT GCAGTGTATA AATAGACGAT 240
 ATGCAGGAAC ATGTCGCCTA TTGAGCCCGT TAAAAAGACG GTGACTAAAT GAGATTTTCT 300
 TTAACCATCA TTCGTTGTCA AAGTTTGGAA ATgATGGTTG TTTTtTATTG TTTAAATTAA 360
 TCATTGCGAC TTCTATATCA ATGAAAGTTA TCTTAATATA TGAACttCA 409

(2) INFORMATION FOR SEQ ID NO: 1249:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 217 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1249:

CTTTCAATTA CGAACAAATC ATTACTAGTT TATTTAATGA TAATGACTGn AATTTAGCAA 60
 AAAACGTAAC ATGATCATTT AGCTTGAATT GGTAAACTG TTTATCCAAC ATTTCCAGAC 120
 CAAATCACAC CGGTAAAACG TCAAAATATA TTGTnTCTAT GCCCGTTTTT ACCAGTTATC 180
 TCATTGCAGG TATATTGATG AATTCACAAG TTGGTAT 217

(2) INFORMATION FOR SEQ ID NO: 1250:

- (A) LENGTH: 176 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1250:

10 CAGAACGTGC GGATCGTTTT TATGCAACCT AAACCAGGTA CGGATTTAGC GTGGTTAAGT 60
 GGCAGTGCAC TAAGTATATT CATTGATCCT GCATTTACAC GATGAAAGCA TTTATTGCAT 120
 GAGTGGGTAG ATGCATTTTG CTGGAATGAT TCACAAATGC ATTAGAGnAC ATTTAC 176

15

(2) INFORMATION FOR SEQ ID NO: 1251:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 212 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1251:

25 TTTCAACTTT CTAAATTATA ATATATCTTT TTAAAATAAG CTAGAATTTT TATATAATAA 60
 ATGTTAATAA CGAAAAGGGA TGATGCATAG TGATCGCAAG CACGCCAGAG GCCGATTTGA 120
 30 TATTGCGAGT TAGTTTATAT GGTITGGGAT GATATGGATA GAATTGGTAA ACATCTCCTA 180
 AAGCATGGTA TAGTGCAATT nAAAAnCTGT GT 212

35

(2) INFORMATION FOR SEQ ID NO: 1252:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 131 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1252:

45 CAGTAAGTCA ATTGAAATGG CTAATTTATT AAATCTATAA AAGCATAGAG CACTGTTGTG 60
 AGTTCATAAT CAAAGATTTA TAAATGTnTC AGACTGCCAA TATAACATTT AGGACCTAGA 120
 ACATTGATTA T. 131

50

(2) INFORMATION FOR SEQ ID NO: 1253:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 462 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1253:

5 TTAGTAGTCA TCGGTATTGG TGGTTCTTAC TTAGGTGCAC GTGCAGCAAT CGAmATGTTA 60
 ACGTCATCAT TTAGAAACAG CAATGAATAC CCTGAmATTG TATTGTTGG TAATCACTTA 120
 TCATCAACAT ATACGAAAGA GTTAGTTGAT TATTAGCAG ACAAAGATTT CTCTGTAAAC 180
 10 GTTATTTCTA AATCTGGTAC AACTACAGAA CCAGCAGTTG CATTAGATT GTTCAAACAA 240
 TTAGTTGAAG AAAGATACGG TAAAGAAGAA GCACAAAAC GTATATTGTC AACACGGAT 300
 AAAGAAAAAG GmGCTTTAAA ACAGTTGGCT ACAAACGAAG GTTATGAAAC GTTTATCGTA 360
 15 CCTGATGATG TAGGTGGAAG ATATTCTGTT TTAACAGCAG TAGGATTATT ACCAATTGCA 420
 ACAGCTGGAA TTAACATCGA AGCTATGATG ATTGGTGCTG CA 462

(2) INFORMATION FOR SEQ ID NO: 1254:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 25 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1254:

30 ACTCATAAGT GAATGGTTGA TTACCACTAG TTAAACTTC ATATACTATA GTTCTTTTTT 60
 TTATTTTGCA ATTAGTTATT TTCATTATAA ACTTCCTTTC AAACACTGCT GAAATAGACG 120
 TCTTTTTCAA ATAAGCATGA TTAATACTTC AATTCTTTAA TCCACATATA TTTAAAAGTG 180
 35 AGGTAGTAGG TAATAAATAT AAGACTTAAA GTTAAGATTG CTTTTTCAT GTTTCATAAT 240
 TAAACCTCT GTAAATTTAA GGTTAGTATT ATGAAATAAT GGATTGGTTT ATTCTTTAGT 300
 ACTAACTTCG TAGTAAATTA TATAGTTCGC TAAATTGTAT TTATCTACTA TATTTTGGGA 360
 40 ATAAACAATT TCCTTTTCTT TCTTCAGTAA ATTATAAAAA 400

(2) INFORMATION FOR SEQ ID NO: 1255:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 137 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 50 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1255:

5
 10
 15
 20
 25
 30
 35
 40
 45
 50
 55

NAATCTATGT ATGGGGGCAT CCAAGATTT CATAGACTAC TTATTTGTTG ATGAAGCCGG 120
 ACAAGCAATC CTCAAGC 137

(2) INFORMATION FOR SEQ ID NO: 1256:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 139 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1256:

TGAAATGTAG AAATTGAATT AGAAATGAAG ATTAAAAATC AACACGTATC GTTCAAGTGG 60
 TGCAGGTGGT CAGCCGTAAA CACAACTGAC TCTGCGTACG TATTACCATT TCCACTGGTG 120
 TCATTGCAAC ATCTTCTGA 139

(2) INFORMATION FOR SEQ ID NO: 1257:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 177 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1257:

TTACCANTTA TTTTAACACC ATGTTTAGAC CAATTTGATC TGAATAAATT AATCGCTGTT 60
 TGTACCTCCA AATTGTTACA ACGTACACCT TTAGTTTTTC TAAATTAATG TATATTCATC 120
 ACATCTTCTT CAGTTAAGGG TCAAAGTATA ATTTGTCGAA ATTGTGAAGT CGTTGTA 177

(2) INFORMATION FOR SEQ ID NO: 1258:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 250 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1258:

AAGACCAACC GAAATGAATA TCGACATGGA TTAAGCCTAT ATTCAGATGT AAACGGCGAT 60
 TATATTAAAA AGCCAATTAC AGAATGTAGT GGTTAATGAA ATATGCCCAA GAATGGGCTG 120
 TATCACTTAG GTGTATCAAA CTGACCAAAA ATTGGAAGGA CTTTAGGCCA AAAACCATGC 180

TTAATTTTTC

250

(2) INFORMATION FOR SEQ ID NO: 1259:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 170 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1259:

ACATTACGG GACATTTTCAT TACATCACCC TGCTTTATTT TGGATTATGG CCTAATTTAT 60
 ACTGATAAAT CTAGGAGGTG GAAAAAAGAA TGCCCTGCAA TTTAATTnCA TTAAACCAAA 120
 TAATGAAACA ATAAAAAACA TTATATCGTT ACTTATTAAG TAATTTGGCA 170

(2) INFORMATION FOR SEQ ID NO: 1260:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 313 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1260:

TTTGTA CTCC GATACGTTGT ATTCAGGTTG ATGACACTAG GAATTTGTAA TGATCAATTT 60
 CTCTAATTCT TTACAATTGA TAGAATTCTT CGATTTGTGG ATAGACATTC ATATCATTGT 120
 CTAATGATTT TTGGTGATTC ATAAATTGTG ACTAAAGCTT GGATGCTTTA GGATTGTAGC 180
 TGAGACACAT GTTGC GTGAC TnGGATTTA TCAhATAATC TCAATCACGT GATCCnATCA 240
 CATTTCATCAG CTCACTAAAT CAAGATGATC GTCGTTTATG GGCGATTAAT GCGGTACCGC 300
 CAGTGTCCGC ACG 313

(2) INFORMATION FOR SEQ ID NO: 1261:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 206 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1261:

TAGCGATCAT TTAATCAAGG TTAGATTATT TAATGTCAGC ATTACGTTTG ACAATGAACT 60

GTTTGAGGTT ATCACAATGC CATTTAACAC TATGCGCACA TGGCTGAACT AATnAGCGAC 180
 GAGATGACTT CAAACCTTGA TTAGGT 206

(2) INFORMATION FOR SEQ ID NO: 1262:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 144 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1262:

AAGTGTGTAC ACGATAGCTA AACTCAAATA TCACAGAACA ACAAATGTCT TAGTACTTTG 60
 TGCCGGTGGT GGTACAAGTG GATTATTAGC CAATGCACTA ATAAAGCAGC TGAAGAATAT 120
 CATnTGCCAG TGAAAGCGGC ACTG 144

(2) INFORMATION FOR SEQ ID NO: 1263:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 132 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1263:

ATAACGACAC CTAATGCAAT TTGAATAAAG CAGTAGAATT TGTGGGAATC GATTATTGAT 60
 AACCGAACTA ATAATCACAG CAAAAATAAA ATTAAAAATG CTCTAATAGT GCCTACATnC 120
 TCCTCAAATT TT 132

(2) INFORMATION FOR SEQ ID NO: 1264:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 159 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1264:

TATGTCAATT TCGTAGAATT GGTTTTAnGC GCTATTITAGA ATAGCCATCA GATAAAATCA 60
 TTATTTAAAC GTATAATAGG TCAAAATATA GAGAGTTACT ATACAAATTT CTAACITTCa 120
 CTTAAAATAA AATATATATA ATTAAAGTGG AGGAGAAGG 159

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 132 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1265:

ATAGCTCAAG CAATCATTAT GTTTATAATG ATTGTATGGT TCTTTATAGA TGCTTTATTG 60
 ATTAATTAAT AAAAAGCTTA TTGCAAATA TGTTCGCG TAACGTAAAT TTAGTGATT 120
 TATCATTAAC AG 132

(2) INFORMATION FOR SEQ ID NO: 1266:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 405 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1266:

CATGGATTTA TCTTAGCGAT TGGTCTAATT TTACCTTTAG GTGCACAAA TGTATTTATT 60
 TTTAACCAAG GAGCTAATCA ACCAAAATAT AGATATGTAT TGCCTGCAAT AATTACAGCC 120
 GGGTTGTCTAG ACAGCTTACT TATTATTATT GCAGTGGTAG GAGTWTCTAT CATTATTATG 180
 TCTTTACCTG TACTTCAWGC AWTATTATTTAT ATAGTTGGTT TAATTTTCTT GATGTATATG 240
 GCTTGGACCA TTTGGCATGA TAAACCCTCA ACAGATGGAG AAACCTCAAAT TATGTCTCCA 300
 ATGAAACAAG TAAGTTTTGC TTTATCAGTT tCATTACTCA ATCCACATGC TATTTtAGAT 360
 ACAATTGGAr TAATTGGtAG TAGTGCTGCA TTATATAGTG GCnGC 405

(2) INFORMATION FOR SEQ ID NO: 1267:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 125 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1267:

TCTTTATATT GCAGTACAAA ATTCGCGTGG AGGTTTAACA CAAGTAGACC GCACAAGATT 60
 TAGCGTCTGA AGGTATTACT GTGTAATGCA TTCGCACCTG GnTATCGTTC AACACCAAT 120

(2) INFORMATION FOR SEQ ID NO: 1268:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1268:

TTTGCCCAAG TGACGTAAAG TACCCAATGT CCATTTGTAC TTGTATCGCC ATCAACAGTA 60
 ATCATATTAA ATGTATGGTC AGTCGAAGAT TTTAATAATT GATGAAGTGT ATTTCGATTCA 120
 ATCGATGCAT CGTGTATATAA AAGCAAGCAT GTAGCCAATT GGAATCAAC CCGA~~n~~CTTGG 180
 CACACATGTA CGTTACACAT TAGAACA~~n~~CAA GTGACCGACG GTAATCCTAC CCGCTCAACA 240
 CAAGCGC 247

(2) INFORMATION FOR SEQ ID NO: 1269:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 215 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1269:

TCATTGTATA TGAGCAGATT GGCTAGGCGG TGGCTGGACT GACGGAATCG ACACCCGGCT 60
 GGGGTTGGGA AAGTACAAG ACGCAACATG CTATGATTTT CCTATGTGGT TATCGTCCGA 120
 TTTAAAGTGA GCAGCGCAGG GTCAGTCATC TCTCACAG~~n~~A CCTAAAAAGA ACAGTAAG~~n~~ 180
 CAACCTAAAG CAGTGGAACT TAAATCATC AAGGT 215

(2) INFORMATION FOR SEQ ID NO: 1270:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1270:

ACAATAAAGA CTATTAAAAG AGATATAGGT TAGATATTAC ACTTTTAGAG CAAGACGGTA 60
 TAAATGCAAG TAAATTCGTG TATTTATCAA TACAGCAGGT ~~n~~GAGTGAAAG GCCCAGCAG 119

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 223 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1271:

CGTGGCACGT TAAGCGTTTA ACCATAGCAT TAAGATGATT GTCTAGCAGA GCGGATTTC 60
 GGGCTCACTA CAGTGCATGA TGAACCTAAT GCTTCAAATG TAACATTAAA AATAAAAGCA 120
 ACGATGTCAC TTCTTACTTC TACATCTGCC ATnTTCGTGA TTTCGTATCT ATCCCGCATC 180
 TCATCTTGAA CGTACGAGCC TAATCGCCCh GCGCGATCCT GCC 223

(2) INFORMATION FOR SEQ ID NO: 1272:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1272:

TAGTTACAAT ATCTGTCAAT TTCTGGAGAA CCACTAAAGC TATGCATAAT CCCGCCTACC 60
 TCTTCAGCAT GCTCCTCCAA TAAGATATCG GTACAGTCTT GAGnTGCTTC ACGGTTATGA 120

(2) INFORMATION FOR SEQ ID NO: 1273:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 126 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1273:

TTGCGCGGCA GTAAAATTCA AACTATTGGC GTCATTTTGC CTAGCTTAAC AAATCCGnTT 60
 TTCTCAGCAC TGATGCAAAG TATTCATGAC CATAAACCAT CTGATGTTGA TTTATGCTGG 120
 TTAACA 126

(2) INFORMATION FOR SEQ ID NO: 1274:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 131 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1274:

GATTCTGAAG GATCAATACn ACATGTACAA TTTTGGCGTA GGTGCAAAGG CATCAGGTTT 60
 5 GCTTGCTAAT CTACATCGAA GCGGCTACCT AAATTAATGA GAAATCACAC TCAGTTAATG 120
 CATGTACTAG C 131

(2) INFORMATION FOR SEQ ID NO: 1275:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 159 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1275:

TGGAGTATTA CCTCAAGTGA ATACAACATA CCGTTGGAA GATTTTTCAA AACTTTAATT 60
 20 GGACCAAGTG ATGCCATTGA TGAGTTAAAT CCTAATAGAT TCAGGTTACC TCGGATGATT 120
 GATACTAATT TGGCCTGGCG CACGCTTTAG TANTAGTGG 159

(2) INFORMATION FOR SEQ ID NO: 1276:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 577 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1276:

GAAGTAAATA ATATATAGAA TATAACAGGA AATAAAATAG ATAATATTAA TGTTGTTTTT 60
 TTACGCATTA TAACTTTAAA TTCGATTTTC AAGTAACTTA GTATCATAAT TAGATCCCCT 120
 40 TTGCTTTTTTA TTGnTGAAGT ATGAATCAAC AATTGAGACT tTTTGTTATT CAATATCATC 180
 CAAATTAATA TGAAGTTGTT GAAGATATAA AATCGTATCA TTTACATTG AAGTAATAAT 240
 TTTsATAGTG CCATTATGAT TTTyycTGAA TAACTAAATC ATCTTTATCT AGTTTAACT 300
 45 TTCTTATATA TTCATCGGAT AACGTAATCT GAGATTGCTG ATTGGTTCTA ATATGTGACG 360
 TTGAATCATT AAGTATTATT TCTCCATTTT CAATGAGAAT AATTTTGTCT GACATACGTT 420
 CGACTTCTTC AATATAGTGC GATGTATAGA GTATCGTTTCG ATTATCTTCT TTTAAATTTT 480
 50 CAATAATTGA CAAAAATAT TCTCTAATTT CTATATCCAT AGTCGATGTT GGTTCATCTA 540

(2) INFORMATION FOR SEQ ID NO: 1277:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 131 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1277:

CTAAATTAAG GTAATAGTTA CCAAGTACCA TATCTGTGG ATGGTGTACT ACAGGTTTAC 60
 CATCTTTAGG TTCAAGATGT TTTGATGACT GCTAACATCA ACATTCTTGC TTCAGCTTGT 120
 GCCTCTTTTG A 131

(2) INFORMATION FOR SEQ ID NO: 1278:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 166 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1278:

GTTTGCGATA TTTTAGGCAG ACAACCTAAC TTTACAGAAA CAGGTATCTT TTCTGTTATG 60
 TGGAGTGAAC ATTGCTCTTA TAAACATTCT AAACCGTTTT TAAAGAATTT CCTACGCAGG 120
 TGCCATGGTT TGGGCTGGAG TCAGGTGCGT TGTGTATAGC TGATnA 166

(2) INFORMATION FOR SEQ ID NO: 1279:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1279:

CATAATTATG AAAATGATAT GATTTTTATT AGACCATTTA AAAAAGCATA ATTTAAATCG 60
 AAGGCAGGAC ATTGAAATAT GAAATTTTCA ACTTTAAGTG AAGAAGAATT TACCAACTAC 120
 ACCAAAAAGC ACTTCAAACA TTATACGCAG TCTATAGAAT TATATAATTA TAGAAATAAA 180
 ATAAATCATG AAGCACATAT TGTGGGAGTG AAGAATGATA AAAATGAAGT TATAGCTGCA 240
 TGTTTATTAA CAGAGGCACG AATTTTTAAA TTCTACAAAT ATTTCTACTC TCATAGAGGT 300

ATTCATTTAT AAAAATAGAG GAGTATTTAT TCTTGTGAT CCATATnTAA TAGAGAAT

418

(2) INFORMATION FOR SEQ ID NO: 1280:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 449 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1280:

GACATATCAT AAATTACATG GTGATAAAAT TnTCGGCTAC GATACTAACG GATTCCCGAT	60
TACCTGGTTT TATCCATTAG GTGAAAAGAA AGTTGAACGT AAGGCACCAA AATTAGAAAA	120
ATAATTAAAT AAAACAGCTT AATGATGTAA TGAAATTAGT GAGTTAATCA CTGACTTCTA	180
CGTCATTGAG CTGTTTTTTT GTGCTTTGTT ACAAAGCATT ATTGAATTTA TTTTACGTGT	240
TCATATTTTG AAACATCAAA GCCGCTCTGT TTAGCTTTGT TGATAATGTC TTTGATTGAA	300
TGTAGTCCTT TATCGGCGAA GTATGATCTT AAGTTGTCTT TTGTAGCTTG GTCAGCATTC	360
TTATCTAATA ACACATCAAT ATAACCTAAT TCATGTTCTA AGAAGTTTGC ATCATCATGT	420
AGTACGAGTC CATTTTGAGA ATAAACTTT	449

(2) INFORMATION FOR SEQ ID NO: 1281:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 289 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1281:

TATTTATATG TACTGATGAT GAAGTTTATT ATCTATCAAG TGGATCAAAT CCGAAATATA	60
ATCAGTATAT GGGTGCATAT CATCTACAAT GGCATATGAT AAAATATGCA AAATCACATA	120
ATATTAATAG GTATAATTTT TATGGAATAA CAGGCGTCTT TAGTAATGAG GCGGATGATT	180
TTGGTGTTC ACAAATTTAA AAGGGTTTTA ATGCACATGT TGAAGAATTA ATTGGTGATT	240
TCATCCAACC AGTAAAACCC ATTCCAATAT TAATnTGCCA AACCTnAAT	289

(2) INFORMATION FOR SEQ ID NO: 1282:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 402 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1282:

5 ATTCAGGTCG AGGTGGCCCC GCTCCATGCA CCGCGACGCA ACGGGGGAGG CAGACAAGGT 60
 ATAGGGCGGC GCCTACAATC CATGCCAACC CGTTCCATGT GCTCGCCGAG GCGGCATAAA 120
 TCGCCGTGAC GATCAGCGGT CCAATGATCG AAGTTAGGCT GGTAAGAGCC GCGAGCGATC 180
 10 CTTGAAGCTG TCCCTGATGG TCGTCATCTA CCTGCCTGGA CAGCATGGCC TGCAACGCGG 240
 GCATCCCAGT GCCGCCGGA GCGAGAAGAA CTAATTGATA CAACACTTTC TCAACCTGAT 300
 CTTCTTTACC TTCTACATAG CGCGTGAGCA GAACCATCTT GATGgCACAG CTAAATAATG 360
 15 CaATgGGAAT GATGTATGAC ATTCGGGGTG CATAATTTCT CT 402

(2) INFORMATION FOR SEQ ID NO: 1283:

(i) SEQUENCE CHARACTERISTICS:

- 20 (A) LENGTH: 224 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1283:

25 TATTGACAAC CAGAGTACAA ACAGCAGCTA TATTATAGAC TTAGGTCTGA AGTGGTAGTG 60
 GCGGTGGACT ATTGTTGCCA CTGGACACCC GAGATATTGC TCAGCAnAGC ATCATATACA 120
 30 GGAAGTATTA AAAGAGACTT GncGAGTAAC AAATACTGAA GTAATAAGAT TAAAAGAGTG 180
 AGGTGTATAA TTATCCTCGT TCTTTTATAT TAGTATGATA GAGA 224

(2) INFORMATION FOR SEQ ID NO: 1284:

(i) SEQUENCE CHARACTERISTICS:

- 35 (A) LENGTH: 146 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1284:

45 CGTGGGAGAT TGTGCATATT GATTATGCAA GGAAGnACGC CATAAAAGTG GATGGCCAGA 60
 CATCATTAAT ATTATTGATA CCACATCAGA AGGTATTCAA AGTGAATCGG TGATAAGTGA 120
 50 ATCAATTAAG TCTGCCAAAG AAAAGA 146

(2) INFORMATION FOR SEQ ID NO: 1285:

- (A) LENGTH: 137 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1285:

10 ATTTCGCGTG ACTGGACTTG GATCCGCAAC TTGGTAATTT AAGGAATTCT TGTCATTATA 60
 AGCCCTCCAT TTCATGATTT GATTGGCCAC TCGGTAACCA TTGGGGTTAC AGCTTCACTA 120
 GGGGAnATAC GAACCTC 137

15 (2) INFORMATION FOR SEQ ID NO: 1286:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 594 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1286:

25 GCTATTGATT ATGGTTAGCm TGTTGTTcWc TTTACTCATT GTTCCTTGGt TAAGCTCrAA 60
 AAAAGCACGT ACTTTAAAGA AACATGCAGC TAATGAACAG GCCCGATTTT TAAATCATTT 120
 TTATGATTAT AAAGCTGGTA TGGATGAACT ACGTCGATTT AATCAAATTA ATCATTATCG 180
 30 AGATAATTTG ATGGCTAAAT TAAATCATTT TGATAAATTA CAACTTAAAG AGCAACGCTT 240
 TTTAACGATT TATGATTTTA TATTAAATAT TATTGCTATG CTTTCGATTT TTGGTAGTTT 300
 35 AGTTCTAGGA TTAATTCAAA TTAATGCAGG CCAACTAAAT ATTATTTATA TGACGAGTAT 360
 AGTTTAAATG GTCTTAACTT TATTGAACA AGCTGTACCA ATGACAAATG TCGCGTATTA 420
 TAAAGCGGAT ACTGACCAAG CATTCACGA TATTAATGAA GTGATATCTG TACCTTCTAC 480
 40 TAATGGAAAA AAACGTCTTA ATGATAAGTA TGATGCAACG AACATTTATG AAGTTAAGGA 540
 TGCTAGTTTT AAGTATTGGA ATCAGCAAAC GTATGThTTG TCGGATATTh ATTT 594

45 (2) INFORMATION FOR SEQ ID NO: 1287:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 233 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1287:

55

TGAAGTAGTA ATAAACCCGG AACCTAAAA CTGGATGGAG GATGAAACCA AAAAGGAACC 120
 AGCCAAGCCA AATTGGGGAA ACCAGGACGG CCAATGGAG GTCCAACCA TCCAAACCCC 180
 ATTCCGCTAA TGnCTATGGG TCCAATTAG GAATCCAATG GATGGATGGA TTh 233

(2) INFORMATION FOR SEQ ID NO: 1288:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 132 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1288:

AATCCCTGTA CGTTCGTAAA GCTAGCTGGn TAATAAAAAA GAGTCTGGAA AGTAGGCAAC 60
 AATCAATGAC AATGAGCAGA TCCAATCGCA GTATGCTTAC TCGTGTAAGA AACGCAAACA 120
 TGGTGCGTCA CG 132

(2) INFORMATION FOR SEQ ID NO: 1289:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 154 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1289:

TATCTGATAA TTCTGTACCC AGGCGTTTTA ATATGTTTAT CTGGTGTTCAT GATACATAAA 60
 CATTGTACCT TTAGGTCATA CGATGTCGCA AATAACTGCT CTTGCCGTTA CAACACCATT 120
 ACGGTTATAC ACTTnTAGCC AATCATTATC TGGG 154

(2) INFORMATION FOR SEQ ID NO: 1290:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 145 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1290:

AAAAGTGGCA CATGCGGCTG TAAAGTCCTC TGTTTCTGAT AAATCATAAC CTATATACAT 60
 GTCTACCTTC CAACTCATCT AAGAAATAAG TCATATTTTT TTGAATGTTG GATAATCAAT 120

(2) INFORMATION FOR SEQ ID NO: 1291:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1291:

CTTAATGCTA TATATTCTTT GTTTTGATA CCATTCATC GTCTTCTCTT GATTTCTAAA 60
 CAATTTAGAA AATAAAAGAA TATACGCTTC AGACTTATTA AAACCCGCTA TATCATCTTG 120
 ATATTGTATT AACAATTGAG TAAAGCTGTG TATTAAGTCA TCTTCTTCG ATGCAATGGT 180
 AGTTAATGAT TTACACGAT AAGCATATTT ATCTGTAAAT AACCTAGCAA CTACCCACC 240
 TAAATCATGT CCTAGAATAT GTGCCTCATG AATATTTAAC TTCTCCATTA GAATTTTAA 300
 ATCCTCAACG TGATCGTTTA AATCGTATGA TTCACTTTTA GAAGACTTGC CATGACCTCT 360

(2) INFORMATION FOR SEQ ID NO: 1292:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 164 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1292:

TGTGTTAGTT GTTTATGTTG TTGATATATA CTGCTCGTGC ACATGGTACC CAGACGATTC 60
 AACGnTGAGT ACACAAAATA CAAATCTAC GGCACATGGT ACCGTTTATA AAAGATGTGG 120
 AACCTTACTA GCATTTGTTG AGAACGCTAC ACGTTTAAAT CAAG 164

(2) INFORMATION FOR SEQ ID NO: 1293:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 132 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1293:

TTAATTTTCT ATATATTTCT TAGGTTATAT TGGTATCTAT GCCAGTAAGT GACATGACGT 60
 TAGATCATTG AATCCAAGAT CGAnACATTG GGACATATTT ATTAACGACA TGGCTTCAAC 120

(2) INFORMATION FOR SEQ ID NO: 1294:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 213 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1294:

GTCATGChTA ACAGGTGAAT ACCTAGTAAT TCAGATATTA TCATTATAT ACCCTCTTAT 60
 ATTTTAGTGC ATTATCTCGA AATCGAGATA CTTAATGTAA ATTTTAGTG CAGCCTACAC 120
 TTCGTGATTG GGCAnTAGTT CTAAACGCT GTGGTAAGAT GTTAATTCAT CCTTGGTTAA 180
 CACACAAACG CTTGGTTAAT GCTCAGCAGC TAG 213

(2) INFORMATION FOR SEQ ID NO: 1295:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 163 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1295:

AAGAAGTTTG AAGTCTATGA AAACAATCAA AAATTGCCAG TGAGACTTGT ATCATATAGT 60
 CCTGTACCAG AAGACCATGC CTATATTCGA TTCCAGTTT CAGATGGCAC ACAGATGAAA 120
 TGTTTCTCGn CCAATGAGAG GGAGAACATA GTATCAATAG ATG 163

(2) INFORMATION FOR SEQ ID NO: 1296:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 207 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1296:

TAGCTTTAAT ACATTCTGAT TTTTAAACGC TTCGAAATGT TTTCAGTAAC TAATTTTGCC 60
 ATAATCCCAA AAACCTCTTG ATTATTAAC TGCnTTTGAT TGGCTACATT AAGGCTTTAT 120
 ACACATCAGC TCACCATGCC CATATCTACT AATGGTTATA TCCCTAGAGT CCCAGCGATA 180
 TAACATCAAC GCTTACnGGA GTTTCAG 207

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 145 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1297:

ATGGCATCGG TTGGTTATGA AAAGnCAAGC CATGGGGAGG CCATATTTGG GGTGGAATCA 60
 TACCTGGAAC CTTTGGTGCC TACCACCAAT TGTAACGGT TTTACCATCG GATTTTTTAGT 120
 GATACAGCGA TATGTTTTGT ACAGG 145

(2) INFORMATION FOR SEQ ID NO: 1298:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 139 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1298:

TCCAAAAGTT AAAGTCAAT TGAAACAGAn AAAGCTTATT ATGTCTGGAA AAGTATTAAA 60
 AGTAATGGTA TCAAATGACA TTGAACGTAA TCATTTTGAT AAGGCATGTA ATGAAGTCTT 120
 TCAAGCGTTG AATTGTGGT 139

(2) INFORMATION FOR SEQ ID NO: 1299:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 399 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1299:

GATATTGGCA ACCTTCAGCC GATGACCTCA TGGCAAATGA TTGGGAAGTT ATAAACCCAA 60
 CTAGAGACCA GGAATTATTG AAGCAATTAT AGAAATGCTA TCAATGATAC TTTTAAATT 120
 GTTTTAAAC TCATTTTCAA AGTAAACAAC AGTCTTGTCT GAAATTGTTA CATGATAAAT 180
 AGTGTTACTA GCATACACGC CGTTTAGGAA CCCAGAGTTT TTAAGTTTAT TTAAATCGTA 240
 TTTTACATCT TCGAAATGTA GTTTTGGAAA ATACTTTGTA TGTATATCTT TAGCACTTCC 300
 AAAATTTATT GGCAGGTAA TTTAATCGAA CCTAACTTTA CACATTCTAA ATAATCTTTG 360

(2) INFORMATION FOR SEQ ID NO: 1300:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 693 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1300:

CTACAGTGCA ATTAAACCAT GAAGTTGTTG ATTTTGAACA ATTATCAAAT GGTCAATGGG 60
 AAGTTACTGT TAAAAATCGC CTAAGTGGTG AGAAATTCAA ACAAGTAACT GACTACGTAT 120
 TCATCGGTGC TGGCGGTGGA GCAATTCCAT TATTACAAAA AACAGGTATC CCTGAAAGTA 180
 AACATTTGGG TGGATTCCCT ATCAGTGGTC AATTCTTAGC TTGTACAAAC CCAAGTTA 240
 TTGAACAACA CGATGCCAAA GTTTATGGTA AAGAGCCACC TGGTACACCA CCAATGACTG 300
 TACCTCATT AGATACGCGT TACATTGATG GTCAAAGAAC ATTATTATT GGACCATTGT 360
 CTAATGTTGG ACCTAAATTC TTGAAAAATG GTTCTAACTT AGATTTATTC AAGTCTGTTA 420
 AAACATACAA CATTACAACT TTATTAGCAG CAGCAGTnAA AAAGTTACCT TTAATTAAAT 480
 ACTCATTGTA CCAAGTAATT ATGACAAAAG AAGGTTGTAT GAACCACTTA CGTACTTTCT 540
 ATCCAGAAGC ACGTAATGAA GATTGGCAAT TATACACTGC TGGTAAACGT GTACAAGTTA 600
 TCAAAGATAC ACCTGAACAC GGTAAAGGAT TCATCCAATT CGGTACAGAA GTGGTTAACT 660
 CACAAGACCA CACTGnAATT GCATTATTAG GTG 693

(2) INFORMATION FOR SEQ ID NO: 1301:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1301:

CATACTTGGG TAATGCTGCC CATGGnACGC TGGnACAAGG TAAAGTTGCA CGTTTAATTT 60
 GTGnATGTAT ATAAAACAGA TGGGAACACC ATTTGAAGGG GATCCTCGTG CAACTTAAA 120
 ACGTGTATTA AAAGAAATGG AAGATTTAGG cTTCACAGAC TTAAACCTAG GACCTGAACC 180
 AGAATTCTTC TTGTTTAAGT TGGATGAAAA AGGGGAACCA ACTTTAGAAC TTAATGATGA 240
 TGGTGGATAT TTCGATTAG CACCTACAGA TTTAGGTGAA AACTGTCGTC GTGATATTGT 300

TCAACATGAA A₁TGACTT₂aA ATATGCAGAT GCTGTTACAG CATGTGATAA TATCCAAACA 420
 TTTAAATTGG TTGTTAAAAC AATCGCACGT AAACATAATT TACACGCAAC A 471

(2) INFORMATION FOR SEQ ID NO: 1302:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1302:

CATGTGATTA AGAACGTTCA CTGATGAATT TTTGATGATC GTTCGGTTTT TGTTTGGATT 60
 TTAATGATTA TTTATACAAA AACAGCCGTA TTTCAAGCCG TACATTTTAA ATTAACTAA 120
 ATTTGCATCT AGTTAATAAT TGCATTTATC AAATTTGTCT TATTGATCCA ATCTAATTTG 180
 TACTCACAAA CTAGTTTT₁AA ATTCTAACTT TATCTCTCAG TTCGTTATCA ATCATCAGAC 240
 ATAAACCAAT GAAGCAATCA GAAACACTC TAATTTTCT₂a TTAGAAATTT G₁TTTTAATAT 300
 AAAAAACAG GCTTACTTCA TATAATTTAT GAAATAAACC CGTCAATTTT TGTTTAATAT 360
 GCTTGGTGAT CT₁TTATTCT GCGTAATAAT GCTAAACCTG 400

(2) INFORMATION FOR SEQ ID NO: 1303:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 128 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1303:

AAAAGCTTAG TTGAAC₁TTT AACGTATCTT AGCTACTGAA GGTGCAGAAG TTTTAGAAGC 60
 AAAAGACTGG GGTAAACT₁NC GCCTAGCTTA TGAAATCAAT GGATTTCAAA GATGGGCTCT 120
 ACAACATC 128

(2) INFORMATION FOR SEQ ID NO: 1304:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 141 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

TCCTTCGGAT TCTAAATGGC ATTGGACAGT GTTTACAAGC TCGCATTCTT CCACCTTTTTG 60
 CAATTTCTTT TACAATTTCT AAAGCTTCAT CAAAGTTTCC TTCAATAGnA AACGATTTCT 120
 5 GCACCATACA TTA CTGACTT G 141

(2) INFORMATION FOR SEQ ID NO: 1305:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 162 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1305:

GACTGGTAAA CACTAAGTGA ATTAGCTGGA CAATGAAAAA TATCCACAAT CATTAAATTAA 60
 20 CGTACGCGTA ACAGATAATA TCGGTTGAAG AAATGTTGAC GTTAAGAGTT ATGACTAAnT 120
 AGAGTAGAAT GATGGTGAGG TCGATTTTAG TAGACTCTGG AC 162

(2) INFORMATION FOR SEQ ID NO: 1306:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 282 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1306:

TTCTTAGTTG CTCGAACATA TAATTGCTT AATAATGATs TAGCTGTTAT TGTGTCATAT 60
 TCTAAAGGTG CCATAAATTT AAAA ACTATA GTAGTTGTTT TAAATTTAGT TGTTGGTGAA 120
 ACTTTGATAT GTATATTTGG TTGAGATTGT CTA CTCAAAT ATATAGCCTC CTCTATATCT 180
 40 TCTTACATCT ATATTTTCT AGTGATTTTA AATTGAACTA AGCTATTTT CATATAATTT 240
 AATGAATACA AAATAGGTTT ATCTGATTCA TTATAGTGCG TA 282

(2) INFORMATION FOR SEQ ID NO: 1307:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 276 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1307:

AAGGAAAAAA CCCTTGGCCT TTGGAAAAAA CCCAAAAGGA AAGGGGTTTA AAAAAAAAAA 120
 AAGTTTAACC CGGTTGGCCC CAATTCCCCG CCGGGGAACC CAAAAGGAnT TTAAAAAAG 180
 5 GAAACCCAAT TCCCGGCCGG AAAAGGGTTT TTAAGCCCAA CCGGATTTTA AGGAAAACCA 240
 TTTTAAGATT ACCTGGGAAA AAAAACCGTT TAGGAA 276

(2) INFORMATION FOR SEQ ID NO: 1308:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 692 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1308:

20 TGATTTTAAT GCTCGTACAC ACAATTACAA AACTGCAAGA GAAAAAGCAT TGAGTAATAA 60
 TCATATTCCA GAAAATGTAT ATGACAATCT AGTAAAACT GTACATAAAT ATTTACCATT 120
 GCTACATAGA TATACTGAAT TGCACAAAGA ATTGCTAGGT TTAGATGACT TGAAAATGTA 180
 25 TGATTTATAT ACACCATTAA TTAAAGATAT TAAGTTTGAA ATGCCTTATG AAGAAGCTAA 240
 AGAGTGGATG TTAAAAGCAT TAGAACCAAT GGGTGAAGAA TATTTAAATG TAGTTAAAGA 300
 AGGCTTAAC AATCGTTGGG TCGATGTCTA TGAGaATAAA GGTAACGTT CAGGTGGCTA 360
 30 TTCATCAGGT GCACATTTAA CTAATCCATT TATTCTACTT AACTGGTCTA ATACTATTTT 420
 AGACTTATAC ACATTAGTTC ATGAATTTGG GcATTCaGCA CATAGTTAct TCaGTAGAAa 480
 ATTCCaACCg TCaAATTCTa GTGACTACaC TATTTTGTGTC GcTGAAGTTG CaTCAACTTG 540
 35 TAACGAAGCA CTTTTAAGTG ATTATATGGA TAAACATCTT GATGATGAAA AACGCTTATT 600
 ATTATTAAAC CAAGAATTAG AnCGTTTCAG AGCTACATTA TTCCGACAAA CAATGTTCCG 660
 40 AGAATTTGAG CATAAnATTc ATGCAATTGA AG 692

(2) INFORMATION FOR SEQ ID NO: 1309:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 151 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1309:

GGACTATTcG ATGATAGCTT TTTTGACTGG ATTTACTAAA ATGAAAGCAA GTACTATATA 60

atCGAGTAAT ATCTATATAT GACATTTTAA A

151

(2) INFORMATION FOR SEQ ID NO: 1310:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 115 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1310:

TGTGCATTG ATAATATTCA CTATGATTG TGGTCATTCA CATCGTCTAC GCTCACCGGT 60
 CTAAACGTAC CTAACCCAAC ATGTAATGAA CAAATGCGAT ATTAnCACCT TTATT 115

(2) INFORMATION FOR SEQ ID NO: 1311:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 164 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1311:

CACCCAAGTG ACCTCAATGG TATAATGCAT TTGTGAATAC CGAATATCAT TGGAATATCT 60
 CCTATCATAG GAATATAATA TGTATATATC TTCGTAATCn TGTTCATTTT TAAGAAAATC 120
 AATAGAAGTG TATCGATTAA AACTACATTT GAACCATTAC TTTG 164

(2) INFORMATION FOR SEQ ID NO: 1312:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 141 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1312:

GAGGAAAATC GAAGTGAAAT TATTAAAATA TGGCGATGGT GGAATACGAA TAGATGGTGG 60
 TTAAATAGGC GGCTTTATTC GGGTGTTATT GTATGTAAAG TGAAAAATTT AAnCCCATT 120
 CAAATTGGTG ATATCGTTGC G 141

(2) INFORMATION FOR SEQ ID NO: 1313:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 133 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1313:

AATTGGTATT ATGCATAGTG CAATGGATGC TGGTATTAAA NTCCAGAGGA TTACAATTAT 60
TAGTTTCAAT AATCACGATT AGTTGAGATG GTTAGCCACA ACTTTCTAGT GTATCACCAT 120
TATATGTATC GGT 133

(2) INFORMATION FOR SEQ ID NO: 1314:

15

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 629 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1314:

TTGCAATTAG AATGCTGTTT CACCCCTTTA AACCATACTA TATATTTAAA TTTAGAGTCC 60
CATTTACACC AGGTTTAATA CCGAAAAGAC GCGAAGAAAT TGCAACTAAA ATTGGCCAAG 120
TGATTGAAGA GCATTGCTT ACAGAAACTT TAATTAATGA AAAATTGAAA AGCGAGCAAT 180
CACAGCAAGC AATAGAATCT ATGATTCAAC AGCAGTTACA AAAGTTGACG AAAGATCAAT 240
TGTCAATAAA ACAAACTACT TCTCAAATCG TATTGATTTA GAACAAGTAT TACAaACTAA 300
TGGAATCAA TATATTGAAT CACAATTgAA TAATTATTAT aCAAAGCaTC AAAACCAAAC 360
AATAGCATCT TTATTGCCAA ATCAACTTGT AACATTTTAA AATCAGCATG TAGATAACGC 420
AACAGACTTA TTATGTGATC GTGCAAGGAA TTATTATCA TCTGCAAAAG GCACACAAGA 480
TATTAATGAT ATGTTGGATA CTTTTTTCAA TGAGAAAGGT AAGTTAATTG GTATGTTGCA 540
AATGTTTATG ACAAAGAGA GTATTGCAGA TCGCATTCAA CAAGAACTTA TACGTTTAAC 600
ATCTCATCCT AAAGCAAGAA CAATTGTGA 629

45

(2) INFORMATION FOR SEQ ID NO: 1315:

50

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 399 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1315:

ATACAGGTAC GTTCGTTATC AATGGTGCAG AACGTGTAAT CGTATCTCAA TTAGTTCGTT 120
 CACCATCCGT TTATTTCAAT GAAAAAATCG AAAAAAATGG TCGTGAAAAC TATGATGCAA 180
 5 CAATTATTCC AAACCGTGGT GCATGGTTAG AATATGAAAC AGATGCTAAA GATGTTGTAT 240
 ACGTACGTAT TGATAGAACA CGTAACTAC CATTAAACAGT ATTGTTACGT GCATTAGGGT 300
 TCTCAAGCGA CCCAAGAAAT TgntGACCTT TAAGGGGACC AATGGAATAT nTACCGTAAT 360
 10 ACCTTTAGGA GGAAAGACCG GCACCTGAAA CCACTGGAA 399

(2) INFORMATION FOR SEQ ID NO: 1316:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 778 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1316:

ATAAACATTT TAAnATGTAA TThAGAAAT TTTTtagTAC AAAATCTTTC TTAATAATGA 60
 25 TTAAGGAGGT CAGTAATGAT TGAAATTAAA ACATTAAACGA ATAATGATTT TAATGAGTAT 120
 AAGAGACTTG TTTGACAGT CAATGAAGAA TTCACTCAAG ATTACACATTA TAGTCAAACA 180
 ATGACTGACA CCTTAATACA TGACATTTTA AATCAAGGTT CACCGAAATG TATTGTATTT 240
 30 GGCTGTTATG AAAACGAAAC ACTTATCGCA ACAGCTGCCT TAGAACAAAT TCGATACGTT 300
 GGAAAAGAAC ATAAATCATT AATTAAATAC AACTTTGTTA CTAATAACGA TAAATCGATT 360
 AATAGCGAGC TCATTAAATTT CATTATTAAT TATGCACGGC AGAACAATTA CGAATCTTTA 420
 35 CTTACATCAA TTGTGTCAA CAACATAGnn GCTAAAGTTT TCTATAGTGC ACTAGGATTC 480
 GACATTCTTG GTTTTGAGAA AAATGCAATT AAAATCGGAA ATACCTATTT CGATGAACAT 540
 40 TGGCTTTTTT ATGATTTGAT TAATAAGTAA TACAGTTTTA TATATTCTAC rTTTCTCATA 600
 AATTCAAATC ATATAGGTTT TATTTTTTCAT ACACTACTC TACTATTGAG TAGTTGTTTT 660
 TTATTTGATA TGATAACAAT AAGTTTTTTT CAGAATATTC TATGTTTTAG GGGTGTCAAA 720
 45 ACTTAATGGG TAACCGCAAT TATTCATGGA nTTATCnTAA GCGATTGGGT CCTAAnTT 778

(2) INFORMATION FOR SEQ ID NO: 1317:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1317:

5 TGCACAAGGT GGTGCAGCAA TTGCAGCGTT CTTTATTATT AACAAAATA AGAAGTTAAA 60
 AGGTGTGGCA TCTGCCGCAG TATTTTCAGC ATTACTTGGT ATTACAGAAC CGGCTATGTT 120
 TGGTGTACT TAAACTAAG ATATCCATT ATTGGCGCTA TCGTTGGATC AGGTATTGGT 180
 10 TCAGCATATA TTGCTTTCTT CAAGGTAAA GCAATCGCAT TAGGAAGTGC TGGATTGCCA 240
 GgATTtATTT CAATCAATCC AGTACATGCA GgATGGTTAC ACTaCTTTGT TGGTATGACA 300
 ATATCATTca TCATTGcTAT AACAGTTACT TTAaTTTTAT CtAAaAGAAa AGCAAATAAA 360
 15 GAAGTTGTAG AATAAAAAA GAGGTATGAC AGTAATCAA GTATCAGTCA TTGCAAATGC 420
 AATAGGATGA AACTTTAAGC TGTCATACCT TThAATTTAG TTATA 465

(2) INFORMATION FOR SEQ ID NO: 1318:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 150 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1318:

25 GACTTAATAT AACTGATCTT TTGCTATTAT TGAAACATAT TTATAAAGAA AATAGCATTG 60
 30 CATAATACCC AAGCAATAAA TACTATAATA TTTTGGAAGT AACTAATCAA ACATCTAAGA 120
 CATGATTGAT AnCACCACAG AAAAATAAGA 150

(2) INFORMATION FOR SEQ ID NO: 1319:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 131 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1319:

45 CCACCTTTTA ACGTACGTAT CCATGAATCA TATGATTAAT TTAATATCAT TATTACTTAT 60
 TTCTTATCTT TATTnTCTT TTTTCTTCTG AAAAGTAGTA ATGAACCTAT TGATGCTAAT 120
 AATCCCCAAA T 131

(2) INFORMATION FOR SEQ ID NO: 1320:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 140 base pairs

- (C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1320:

TAGTGTCCAA ATGAAAGTGT GGCTACCTAT AGCTGGTCCA TGAAGCTTTA TTTTAACTG 60
 GTTTGTACAA TATTTAAATA TCAAAATCTT CTCGCGnTTT GGACAGTTTT TTTGGTATTA 120
 ACCATTAATA AACGGAAGA 140

(2) INFORMATION FOR SEQ ID NO: 1321:

15

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 140 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1321:

CTTATTATAT AATTCTAATC CTAGTACATT ATACATTTTA TCAAATAGTC AACTGGATAA 60
 CTTTGAAAGT GAATGATnCT TTTAAAATAA AGAAGATAAT ATAAAGTGCT TGATAATGGA 120
 TTTGTAGTTG ATGATTTAAA 140

(2) INFORMATION FOR SEQ ID NO: 1322:

30

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 185 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1322:

TCGTTGCAAC ACAGGCACTA TTTTACCTTT ATATGTTGTA ATAGTTTGAT TGCTGCCATT 60
 TAAACAACCA CCTTTCTTAC TCCACAAATT TACCATGAAT AGCGCGCGCG CCATAGCGGG 120
 ATACTAAAGT GTTCTGCACC TTGCCTGTCT CCTTCAAnTT TCGATTACTG TAGAGCACAA 180
 GTACG 185

(2) INFORMATION FOR SEQ ID NO: 1323:

50

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 148 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1323:

ACCTGCAATT TTCGTTATTC AAAACAATAA CTATGCAATT TCAACACCAC GGAGCAAGCA 60
 AACTGCTGCT GAAACATTAG CTCAAAAAGC AATTGCTGTA GGTATTCCTG GGTATCCCAA 120
 GTTGGTGGTA TGGTGCGGTA nTTGGTTT 148

(2) INFORMATION FOR SEQ ID NO: 1324:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 141 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1324:

GAAAGCATTG ATGGACAAAG ATGAACCACC AAATGAATGG CGATTAGATT CCAATTGATA 60
 TGGCTCACGG AAAATTTATG CTACAATTGC GTCCAGTAAA CAGTGGCACT AATAGTCCAC 120
 TTAnGCTCCC TAGTGGATGA A 141

(2) INFORMATION FOR SEQ ID NO: 1325:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 204 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1325:

TTATACTATC GTGAAGGGTT TATTACTCAA TTAATGCCTA AAAAGGATAA AAGTTATTTA 60
 GTTATTGATA ATTTTAATCG TATAGATACA GACATTTTCC AAACGTATAT TAATGTGTTA 120
 GAAGGCTATG AAGTAACATT ACCACGTTAT AATAAAGACG GTAATATGAT TAAATGGTCA 180
 CGACAAAAAG ATTCTTTCTA TTAT 204

(2) INFORMATION FOR SEQ ID NO: 1326:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 147 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1326:

TTTGTAAAA GTCTTCATTT CGGATGAAGC TTTATCTATT GAACGCTCCA AATTATTTAA 120
AGCAGCTTTT TCTTTATTAA CAGCTGT 147

(2) INFORMATION FOR SEQ ID NO: 1327:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 530 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1327:

CATTAAATGA AGAAACTGAA CCCnGAACTA TACGACGCAG AAGGCAATTT AATTAATAAT 60
AGTAAACAT CCAGCTTAAT CCATTGATGT GTTATAAAAG TGAAAAGCTC CAATCAAAGT 120
TGACGCTCAA ATAGTTTAAAC TTTGATCGGA GCTTTTTTAT AATGTATACC GAAAGGTTCA 180
AATATTATAT AATGGTAGAA TTGAAAGAGA ATATAAAAAA GTGAGGATAT AAAATGAAAG 240
TTAATCCTAA TAATATAGAA TTAATCATTA GTGCAGTAAA AGAAGAACAA TATCCAGAAA 300
CAGAATTGTC TGAAGTGCAC TGAGCGGTCG ATCTAATGTA GGTAAGTCTA CATTTATCCA 360
ATAGTATGAT TGCCAGAAAA AATATGGCAC GTACATCACA GCAACCCGGC AAAACGCAAA 420
CGTTAAATTT TTATAATATA GATGAACAAC TTATTTTTGT GGATGTTCCA GGGTATGGAT 480
ATGCTAAAGT AAGTAAACA CAACGTGAAA AATTTGGGAA AATGATTGAG 530

(2) INFORMATION FOR SEQ ID NO: 1328:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 153 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1328:

AAGAAAGTTT GATCTAGGCC AACCTTTCTA ACAACGATAC GACAGTTTAA TAATGTCTCA 60
TATCTTGACT TCCCATGATG ATATGGTCGT TAATCACATC AATGACTTAA ATCTGGATnA 120
ATAGATGCGA ATGGATCTTG AAAAATCATT GTA 153

(2) INFORMATION FOR SEQ ID NO: 1329:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 115 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1329:

5 TGTAGTTCGT TTGTGCTCTA ATTAAACGGT CGAAACCATG GATTAGACCT GCGATTACAA 60
 CTGCAATGAT ACCTGAAGCA TGAACCTCTT CTGnTAAAAA GTATACGACA AAAGG 115

(2) INFORMATION FOR SEQ ID NO: 1330:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 112 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1330:

20 AACAAAGTTAT CTACATCTGC TGATAGGCAT ACTATTACTA ATAAATAATG CATCTTTTTG 60
 CCAGATGTTT TCTTAATCAA TTGCACCAAC GAATGGCACT CTCATCTGTA Gn 112

(2) INFORMATION FOR SEQ ID NO: 1331:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 203 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1331:

30 TTCATTGCAG ACAnTTGGTG AACCATGTGG ACGAACTAGT CCTAGATTAA GATAAGAGAT 60
 35 TAGTGAnCAT TGCCACCACT GCAATTAAAC ATTCTTGGA AAATTAACCT AAGTTAGAAT 120
 CTTAATGCAT ACAGATACGG CGAAGATGAT GCCAAGAAC GTCACGACTT TATGATGATG 180
 ACTGAACCCA GTTTTACGG AAG 203

(2) INFORMATION FOR SEQ ID NO: 1332:

(i) SEQUENCE CHARACTERISTICS:

- 45 (A) LENGTH: 269 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1332:

50 ATGATGTAAT AATATCTAAT AAGCTTGCTA AGTCTTGAGA CTCATTTTA ATCACCTTTT 60

GACTATCTAT TTCTGTTAGT ACGTTTGACA TATTAATCAC TCCaCyTTAA CGCAaTAWAw 180
 TTTAWTAGCG TTGGCTATTG TTGTTTAACG CGATGGnATT TACAACTTGT AACGTAAGAG 240
 5 AATGAAAAAT AAGCTGnATA TGTTGTTTG 269

(2) INFORMATION FOR SEQ ID NO: 1333:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 142 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1333:

TAGCTTTTGC CCAATATGGT GAATCATGCG CCGTTCTGTA ATAATCTTCA CTTGGCATTG 60
 20 TTGGAATTTG AACACATCC TGTTCAATTT TATAGAnTGC TTAAATGGTA CAGCTGAAAA 120
 ATCAAAGTAA TGTCTTTTTC TG 142

(2) INFORMATION FOR SEQ ID NO: 1334:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 211 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1334:

ACTGATGCCC AATATGCATC TTGnCAATTG CAGGTGTGCA TGACTAAACA CATGACAAAT 60
 35 CTGCCTGACT TTTTGCTGAC CCATAAATAA TTGGnCTAAC TTTTTCATC TTGATCTTGC 120
 ATCCTTGCTT TCCTATTTAA AATGCTACAA ATAAATTTGC CGGCGAGTGA ATTTTAATGT 180
 40 TTTACAACGC TGTCAATAC CTGGGAATAA G 211

(2) INFORMATION FOR SEQ ID NO: 1335:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 129 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1335:

CTTGAATCTC TTGTGCCTCT GTGATGTATC ATCAAATTAT TTGCACTGCT TCTTCTTTTA 60

TCCGCTCGC

129

(2) INFORMATION FOR SEQ ID NO: 1336:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 633 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1336:

15	CATGATGGCn TCTTACCAAA GGCGATTTTA AGAGCAATGA TACCAAGATA TTTTAAATAC	60
	TGATCAAAGT TCAGGTGGTA GCACAATTAC ACAACAACCTT GTTAAAAATC AAGTTCCTTAC	120
	CAACGAAAAA ACATATAGTA GAAAAGCAAA TGAATnCGCC TAGCAATTAG ATTAGAACAC	180
20	CTACTCTCAA AAGATGAAAT TATATATACA TATTTAAATA TAGTTCCTTC GGTAGAGATT	240
	ATAATGGCGC TAATATTTCC GGAATTGCAT CCGCTTCATA TAGTCTATTT GGTATTCCAC	300
	CAAAAGATTT ATCAATTGCA CAATCTGCAT ACCTTATCGG TTTGTTGCAA AGCCCATATG	360
25	GCTATACACC CTACGAAAAA GATGGAACGT TAAATCGGA TAAAGATTG AAATATAGTA	420
	TTCAAAGACA ACATTATGTA TTAAAGCGTA TGTTAATCGA AGATCAAATC ACTGaAAAAAG	480
	AATACAACGA CGCATTAAAA TATGATATTA AATCATTGTT GTTAAATCGA AAAAAGCGTT	540
30	AATTGATGCT CACTTTTTAA AGTAACCACA ACAATGAATC CAAATATTAA AAACAGCAGT	600
	AAGATTATTT TCAATTAGAA AATTTCTCAC TGC	633

(2) INFORMATION FOR SEQ ID NO: 1337:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 317 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1337:

45	ATCAATATTT AGCAGTTATC ATTATGCTTG AACGGGTGGT AAAGGCGGAG AAGTCATCCA	60
	CTTTTTCCTA TACTACAAGG ACCTTTACTT TAAAACAACG AATTACAAA ATAAAAGGCA	120
	TAATTTCTTT TCTGTCACAT CGCTCATTCT AACTACTAGA CTTTAAAT CGTTCCTGTA	180
50	ATTTAACTC AATCAACTnT CAATTAATGA TGCATAATAT GATTATAAGT ATAGTAGTTA	240
	ACTTCAAATA TCTTAGAAAT GTCCTGTACT ATATCTCTTT TATTCTCAA AGTCATAGGT	300

(2) INFORMATION FOR SEQ ID NO: 1338:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 125 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1338:

TACGGCATAT ACCTCGTTCA TCAATGTTTCG TAAACATTAT TTAAACATC TCTTACATCT 60
 TGC GTTGGAA GTTCTTCATA GTCGAATTTC ATTGTnTTAT CAAAGTTTTC CATTGCGAC 120
 ACTCC 125

(2) INFORMATION FOR SEQ ID NO: 1339:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1339:

GAGCTTCGTT CCATTGTTAT CAAACGATTG CCATTCTGAA ATGCTGTAAA TAGCATGCTT 60
 CAAATCATCT TGTGCCTGCA GCAGTTTCTT TGAATATGC TTCATATCAT T 111

(2) INFORMATION FOR SEQ ID NO: 1340:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1340:

TCACACGTTT AGTTTTCTAT GAATACCAAT ATTTTAACAC CATGTTTAGC CAATTTGTCT 60
 GCTAAATTAA TCGTGTTTGT CCTCCAAATT GACACGCACC TTAGTTTTT CTAAATAATG 120
 ATATCATCAC ATCTCTCAGT TAAAGGTCAA AnATATTG 158

(2) INFORMATION FOR SEQ ID NO: 1341:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1341:

5 GCTTCAGGTC AATTAAAACG TTCAAGAGCT TTCACATCTC ACTTATTCGC AAACAAGAGC 60
 ACTAAACAAA AACGTCAATT ACGTAAAGCT AGATTAGTGT CTAAGAGCGA TATGAAACGT 120
 GTAAACAAT TATTAGCATA CAAAAAATAA GAACAAATAC AGAAATCGGT AGGAATTACC 180
 10 TAAGGAGGAA TTTTATATGC CACGAGTTAA AGGTGGAACA GTAACAAGAG CGCGTCGTAA 240
 AAAACGATT AAATTAGCTA AAGGTTACTT CGGTTCAAAA CATACATTAT ACAAAGTAGC 300
 TAAGCAACAA GTAATGAAAT CAGGTCAATA TGCTTCCGT GACCGTCGTC AACGTAAACG 360
 15 TGACTTCCGT AAATTATGGA TTACACGTAT CAACGCAGCA 400

(2) INFORMATION FOR SEQ ID NO: 1342:

(i) SEQUENCE CHARACTERISTICS:

- 20 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1342:

25 GTTGAACAAG GGCAACAAAA ATTCGAGCG AAACAGATTT TTGAATGGTT ATATCAAAAA 60
 30 AGAGTAGATT CGATTGATGA AATGACGAAC TTATCGAAAG ACTTACGACA GCTTTTAAAA 120
 GATAACTTTA CTGTTACAAC TTTAACAAC GTAGTAAAC AAGAAAGTAA AGACGGTACA 180
 ATTAAATTCT TATTTGAATT ACAAGATGGC TATACAATTG AACTGTTTT AATGAGACAT 240
 35 GATTATGGAA ATTCAGTATG TGTAACGACA CAAGTAGGTT GTCGCATCGG ATGTACGTTT 300
 TGTGCTTCTA CACTTGGCGG CTTAAAAAGA AACCTGAAG CTGGCGAAAT TGTTTCACAA 360
 GTTTTAACAG TTCAAAAAGC CCTTGATGCT ACAGAAGAGC 400

(2) INFORMATION FOR SEQ ID NO: 1343:

(i) SEQUENCE CHARACTERISTICS:

- 45 (A) LENGTH: 399 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1343:

50 GAAAATTCA TCAGGTGTTG GCgTGGAACG TACATTCCCA TTACACACAC CAAAAATTGA 60

TTTACGTGGT AAAGCTGCTA GAATCCAAGA AATTCGTTAA TCAGCATTTA AACAAAGCTA 180
 TGTATGAGTC AAATTCGACT CAAACAATAA AGCCATCTAG GTCACITTTA TGGAGTGATA 240
 5 TAGATGGCTT TTTTGTCTGT TTAGTTAATG TAAAGTTGAT AATGTAATTG TTTATTCCTT 300
 CTCTATTCAT AACGTGTTTG CTCAAAATGG TTATATAAAC AAAAATCTAC TAAGTGCCAT 360
 TGAAAAGGAC TTAGTAGATT TATTAAATAT ATGCGTANA 399

(2) INFORMATION FOR SEQ ID NO: 1344:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 134 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1344:

AACTTACAAC ACCAGGTAAT AACAGCAATA AAGGCACCAG TTAGTGCGGT AATGCCANTA 60
 TCTAGGCCCTT TAGGTTGCCA TAGTACGAGA TG TAGAGGTA CTAGAGGAAT GAGTGTCGCT 120
 25 AAAGTTGTCTG TCGT 134

(2) INFORMATION FOR SEQ ID NO: 1345:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 109 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1345:

TCATAATAAA CAAGTTCACA TGAATCACAA CATCTGAAGA CAATGTTCAA AATGAGGCTG 60
 40 GCACAATAGA TGATCGCAAG TCGnATCATC ACACAGTACT GAAGCAAGA 109

(2) INFORMATION FOR SEQ ID NO: 1346:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 113 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1346:

CCATATCTGG nACGACCGAC ACCTTTACCA CCAACGATTG GTGCCATTTG TTTGCATAAG 60

(2) INFORMATION FOR SEQ ID NO: 1347:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 124 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1347:

CAATTGAAAG GTGAATTTTA TAGGTCCATG ACAAATAAG GCTTGTTAAA GCTTATTAAC 60
ACAGTTTCAT CAAATAGTTA AATTAGTTTT TGTTTTGCAA TAAATTGGGT ATAGATTACA 120
AnTG 124

(2) INFORMATION FOR SEQ ID NO: 1348:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1348:

CATCAGTGGC CTGATCACCC CAACATTGA CATCAATGCA TACCAGTTGA TTTGAACAAT 60
GATTGCATTG AGCTATCATC AAGTTTGTCT TTAAGCTACT AAACCCACGA ACCATGTTAA 120
CCCCGTGGTC ACCATCACCA ATTGCTCGAT CTAATTCAGT TAATTCAGAT TCATGTTTTT 180
TAAACGTTTC TTCTAAATTT AATAAACGTG CTTTCATATC ATcAtTTCAT TGTGCaCtaT 240
AAaTGtATAT TaTTCATATT CACTTCTnAT TTAAAGTATG ACTTGTTGTT GGTGCTAAAA 300
ATGChTCCAA ATATTCTGGT TTATnAGGCA CGATAGT 337

(2) INFORMATION FOR SEQ ID NO: 1349:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 162 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1349:

CAGCACGTAA ATACAACAAA GCGATCCCCA GCTGTGGCA CATCATTAAT ACCTGTAATT 60
TCAACAGGCG TTGATGGACC AGCCGTTTTG ATTCTTTGAC CTAAGTCATT ACATGCCGAA 120

(2) INFORMATION FOR SEQ ID NO: 1350:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1350:

CAATTTTACT TTGAATTTCT TTTTATCTT TTCTAGTTT ATCGTCCCAC TCTTCAATCC 60
 ATTTTTTAGC TTTATCTTCA TTATTAGTCA ACTTGCCTAT TTCTTTTAAT ATTCTTTATG 120
 ATTGTATTTA TTGTATGTAT ATGGGATTGT TGGCGCTATT TTTTGGTATT TTTTATATT 180
 TTTATCCATA GcATCTACAA CAATTAAATC TGGTTTTGcT TTAGCAACTC TTTCAACATC 240
 ATTTTCTCCA ATATAATCAA CCCCTTTTAA ATAAGGTTTT AAAATTGAAG AATCTTTAGT 300
 TATATCTGAA ACAGCAATTG GTTTGATTCC TAACTTTATA AAATCACCAA CATAAAATCC 360
 AGTTAATACA GCAACTCTTT TAAGGTCTC nGGGACTTT 399

(2) INFORMATION FOR SEQ ID NO: 1351:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1351:

TAAAACTTAG GCGGTTTTGC ATGATTATAG CGCTCAACAC GTTGAAATT ATAGGTCATC 60
 TCTGGTATTC TTGTACGATT CTTTTTCCAA TCTAAATCAA AGTTTTCAAT TTCTTCTTTT 120
 GAGTTTAGAC TTAATCGATC ACGTTCATGT TCTTTAAAAG ATGGAATAAC TTGTTTAAGT 180
 GACCCCTCCA TTCTTAATTG ACCATGTGAA AACCAAGCTA TGTAGTTACT CACTTGTGAA 240
 ATTTTATCAA TATCATCACC AATTGACACA ATCGTTAAAT TATTTTCAAT ATAATCATT 300
 GTTAATTCAA TCGCACGTT CATAAATTGT GGTGTAAAT AGTCAATAAC ATGATTTAAA 360
 ATAATAATAT TTGATTTTGA TGAGCGTGCA ATACTTAATA 400

(2) INFORMATION FOR SEQ ID NO: 1352:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 117 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1352:

5 AAGGGAACAA AAGCTGGAGC TCCACCGCGG TGcGgCcGCT CTAGAACTAG TGGATCCCCC 60
 GGGCTGCAGG AATTCCGGCAC GAGCATATCT AGTATTTTAG GACGGAGGnA GTACATT 117

(2) INFORMATION FOR SEQ ID NO: 1353:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 153 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1353:

20 AGTTCAGGAG AGTTATAAAT ATTAGGTGG TACATGCCCC AAATCATTGG AATTGTTAA 60
 GTAGATTTTA CAGTTTAGAG ATAACAGACA TGTCTATATG AAGGGCTGTC TACCCTCGTA 120
 AGGTTATATC CTACAGnTGA ACGTATCAAG CTT 153

(2) INFORMATION FOR SEQ ID NO: 1354:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 159 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1354:

35 TGTGTGAACA GCTCTCTATG TTTACGTTGG AAGTATGGTT TATTTTTCAT CTCACATTT 60
 AGTTCCTTAT TTAAGAGTGA TAGAGCAATT GCACTCGTAG GTCAAGAAGC GGGATGCCAA 120
 CACAAAGTTC ACAAGAnAAT ACACTTTGA AAATATTGG 159

(2) INFORMATION FOR SEQ ID NO: 1355:

(i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 118 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1355:

50 CGnCTTCCTT CAACCATTGT AGAAGTTGTC TCATATACTT ACTACGGCTT GCTAATACTC 60

(2) INFORMATION FOR SEQ ID NO: 1356:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 110 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1356:

GGATTCATTG GTGCTTATTT ATTTACATTC AATAATGAGA nCTTTACACA ACCAATTGGT 60
 CAAATTATAG ATGTCAACAT GTTCTTTCGA CACCTACAAA AGATGCACAA 110

(2) INFORMATION FOR SEQ ID NO: 1357:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 133 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1357:

TAATGGTGGG GTATATTTAT ATTAGTACCG AATTTTAGGn GCCTCACTAT CATTTATCAA 60
 ATTATTTAAA GTGGGATCCT ATCGCAATCA ATTGGCAGGG GCAGAATAAT GGCATTAGTC 120
 GTTGAAGATA TCG 133

(2) INFORMATION FOR SEQ ID NO: 1358:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1358:

GTGTCGGTAA GTCCACTTTC TTAAATCATT ATCGTCCAGA ACTTAATCTT GAGACAAATG 60
 ATATATCAAA ATCATTAAAT CGAGGAAAGC ATACTACAAG ACATGTCGAA CTATTCGAAC 120
 GTCAAAACGG TTATATTGCA GACACACCTG GATTCAGTGC TTAGATTTT GATCATATAG 180
 ATAAAGATGA AATAAAAGAT TATTTTCTTG AATTAAATCG ATATGGTGAA CATGTAAGTT 240
 TAGGAATTGT AATCATATCA AAGAACCTAA TTGTAATGTT AAGCATCAAT TAGAGATAGG 300
 GAATATTGCG CAATTTAGAT ACGACCATTA TTTACAATA TTTAATGAAA TTTCCAAATA 360

(2) INFORMATION FOR SEQ ID NO: 1359:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 392 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1359:

CTGTTTTAGT CTTATTGATT GCCTGACCAT TAACTAAGTA ATTGTGTTT GAAGCGGTTA 60
 ATTGAGCAAT GATTGGAATG TCGTATTTCT TTCTCGTTTCG TGAAATGACA TTTGTTAACT 120
 CTTCTAGGTC GTAATACGTT TCGAAAAGTA GCGCGTCAAC GCCTTCTTCA ATTAAGGTGT 180
 CTATTTGAAT TCAGTATGAT AAAGAATAGT TTGTAAGCTG ATATCCCCCT GTTTGGATAC 240
 CTCTAAACCC CACCAACTGG GGCCCAATAT ATACGTAAAC TnTAATTGGC nGGCTTTTTT 300
 GCGATGCGAC GGGGGGCTGG AGGATGCTTA ACCTTAACCT CCAGACCGAA CCGTTTAACC 360
 TTTCCAAAAT TGCACCATAG GAATGGGTGG AT 392

(2) INFORMATION FOR SEQ ID NO: 1360:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 160 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1360:

CCATGGTTAT TTTCTTCACA TTTCATGTAT ATATATTGT TTATTATCTG TCTCTACTAG 60
 ACTGTAACCT CCAACATATC TGTTTATAA ACCAGAGAGC AGTCATTCAA TAAATAAACA 120
 GATCTGAGGG CCAACTGGCA TGTGTCAAC TTATGATATT 160

(2) INFORMATION FOR SEQ ID NO: 1361:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 148 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1361:

GTATCCTAAA GATTCAGTTA ATCGGAGCGT TGTATTGCAT GAAGGTACAT TGCGGAATGC 60

ATATTTATTC ACGATnTTAT TTAGCGAC

148

(2) INFORMATION FOR SEQ ID NO: 1362:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 147 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1362:

AAAATTACTA TGAAGATTGC ATTAGGATGC GACCATATTG TTACAGATAC AAAAATGCGT 60
 GTATCTGAAT TTTTAAAATC AAAAGGACAT GAAGTCATTG ACTGACACTT CACTCATnAG 120
 TGGCGACAGT GTACGTATCA GACTTAG 147

(2) INFORMATION FOR SEQ ID NO: 1363:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 108 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1363:

CTGGCAAAGA AGACAACAAC AAGCTGGTAA AGAAGCAACA ACAAGCCTGG TAAAGAGACA 60
 ACAACAAnCT GGCAAAGAAG ACGGCAACAA GCTGGTAAAG AAGCAACA 108

(2) INFORMATION FOR SEQ ID NO: 1364:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 153 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1364:

GACAATGTTG CTGTAATGGG GAAGGnAATG GGTGGTACC GCGAATTGAA TAATTTAAAA 60
 CCGTAATATA TAATCGTAAT TGTTAAGCCC TCATTTTTAT AAATTTTGGA CCTCTTGAAA 120
 AAGTTACGTT TTCAAGAGGT TTTATTTATC CTA 153

(2) INFORMATION FOR SEQ ID NO: 1365:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 184 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1365:

TAAGAGAATT ATATGCATTC CAAACGAAAC AACAGAAAA ACGGACCAAA CTAAGTGTCA 60
CAAGTACAAT CGCTGTACTA CTGCAAAACA CGCAAAACGA ACACTTACGT ACACACAAAA 120
AGACCACCAT TCACGTCGGG ATTATTAAAA AGGTAGTCTC GTACATTTAT TAAACTACTT 180
ACGT 184

(2) INFORMATION FOR SEQ ID NO: 1366:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 452 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1366:

ACATTAGATG GGTCAATCAT GTTATACACG GTGATTTAGG GGAGTCAATC AAATATAAAA 60
GGCCGGTAAT TGATGTTATT GAGGAAAGAA TTCCAAATAC AATATTACTC GGTGCTATGT 120
CATTAAATTAT TACTTATATT ATCTCATTG CTTTAGGAAT AACGTCAGGT AGATATTCTT 180
ACAGTTTGAC GGATTATACT GTGCAATAT TTAATTATTT GATGTTAGCC ATTCCATCTT 240
TTATTGCGGG AGTATTTGCA ATTTnTATTT TTTCTTTTGA ATTACAATGG TTCCCGTTTC 300
AAGGTTCTGT TGATATTAAC CTAAAGAAG GTACTTTTGA ATATtATATG AGTAAAATAT 360
ATCACACATT TTTACCTGCA TTTACTTTAG GTTTATTATC TACTGCTGGT TATAWTCAAT 420
ATTTACGTAA TGaTATTATT GAAAATTCTA AA 452

(2) INFORMATION FOR SEQ ID NO: 1367:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 141 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1367:

TTGTGAGTAA TTGGACAATA TAAGTGTGG TCTTGGATGG CATATCCTTG GTACGACCTG 60
GGCAACTTGC TTCATAGCGC AGTTAGGAAC TGATCAATCA TTGGCGTTTT GATACCTAGC 120

(2) INFORMATION FOR SEQ ID NO: 1368:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 126 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1368:

TGGTGCAAAT TAAACGGTT GCATATGCAC GTACGACGTA TTGCTAAATA CAATCAATTA 60
 TTACGTATCG AAGATGAATT ATTTGAAACG CTAAATATGA CGGTATCAAA TCATTCTATn 120
 ACTTAG 126

(2) INFORMATION FOR SEQ ID NO: 1369:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 160 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1369:

TGnAAAGTTC ATCAGGGAGC CATTTTTACA ACACAGGGCA CATACGGGTT GTGTTTAGGT 60
 GCAATTGCCC CAAGCGGACA AAGCATTATT TAAAGTTTCA AGTTCTTCAA CGATTTATTA 120
 GTGCACAGGA TCCTGTTAAG AGGTATTTTG AAGACTTCCG 160

(2) INFORMATION FOR SEQ ID NO: 1370:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1370:

AGTAATTCTG CAAATGCCGC AGATAGCnGT ACTTTGAATT ATGAGGTTTA CAAATACAAT 60
 ACCAATGACA CGTCAATTGC TAATGACTAT TTTAATAAAC CGGCAAAGTA CATTAGAAA 120
 AATGGTAAAT TGTATGTTCA AATAACTGTC AACCACAGTC ATTGGATTAC TGGAAATGAGT 180
 ATCGAAGGAC ATAAAGAAAA TATTATTAGT AAAAACACTG CCAAAGATGA ACGCACTTCT 240
 GAATTTGAAG TAAGTAAGTT GAACGGTAAA ATAGATGGAA AAATTGACGT TTATATCGAT 300

AATGGACCA CTGATGTAGC AGGTGCTAAT GCACCAGGTA

400

(2) INFORMATION FOR SEQ ID NO: 1371:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 345 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1371:

CATCAAGAAC ATGTGAGACC ACAATTTGAA TCACCTGAAA AAATAAATAA AGACATTGTT 60
 GGATGGATAA AATTATCAGG AACATCATTAA AATTATCCAG TACTACAAGG TAAGACAAAT 120
 CACGATTATT TAAATTTAGA TTTTGAGCGA GAACATCGAC GTAAAGGTAG TATTTTtATG 180
 GATTTTtagAA ATGAATTGAA GAATTTnAAT CATAATACTA TTTTATACGG GCACCATGTC 240
 GGTGATAATA CGATGTTTGA TGTGTTAGAA GATTATTTAA AGCAATCGTT TTATGAAAAA 300
 CACAAGATAA TTGAnTTTGG CAATAAATAT GGTAATCTCC ATTGC 345

(2) INFORMATION FOR SEQ ID NO: 1372:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 154 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1372:

TTGAAAAGCA GTTTGGATTT ATGCTCAAAC CATGGACGAC GGTTAGGTTT ATGAATGTTA 60
 TTCCAAATAG GTTCATCTAT AAAAAGTAGT GGAAAGTGA AAAAATnAGT GGACCTTCGA 120
 TAATACGATG TATTTATCGT TAGAAGCAGT AATA 154

(2) INFORMATION FOR SEQ ID NO: 1373:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 136 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1373:

GAGCCTAATT ATTCAAGCCA AATCGCATAT GAAATTGATA AAGAAGTTCA ACGAATCGTT 60

CTATACnAGA ACTATC

136

(2) INFORMATION FOR SEQ ID NO: 1374:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 358 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1374:

ATCTTTAACA ATTAAACCA TACTATCTTG AATCATCATC AAATTAAACG CATGTGCGTC 60
 AAGTTGTTTC ACTTTAAAGA CTTCAATTATT AAGACCGACC TTAGACTGCT TTTTAAAAAT 120
 AGGTACATTC GTAATCATAC CTATACCTTG ATTGTCTAAG TGTAATTTGT TTTGGTGATA 180
 TCGATTATAA TCTTGTGCAG TAAAAGCTGT AATCACTACT GATTGTCTTG AAAATATCGC 240
 GCCTTCATTA CCAATGAAGT CTATTGGAAT aTCATCACTA GCCTGTTTTA ACTTGTAATA 300
 AGCACGATTC TnTTCTAAAG AAGCTCTAAA TAATGTCGTT TCATATACTT TGAAGTCT 358

(2) INFORMATION FOR SEQ ID NO: 1375:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 122 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1375:

ATATTGTGTG CTAAATTGTC TTAAGTATGT TTTTGTGTTG nAAGTAAGCA TATGTTATTG 60
 TCTTTTAAAT TGTTGTAAAA GTGCTGTTTT CATAGAATTA ATATCAGACA TCTTTATTAG 120
 TA 122

(2) INFORMATION FOR SEQ ID NO: 1376:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 467 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1376:

CATTTTCTTC GGTTCTGTC TTTTATGCG TAGATTTATT TTCTTGTTCT TGTTATTAC 60

CGATAATTAC GATGGTAATA AGAAGTTTTT TCAAATATAA CGCCTCCATG TTAATGAAAA 180
 GTAGTTGATA CGTGAAGCTA AATAATTnAT TTCAATATTG CCATAATCAT TTTAAAAAAT 240
 5 AAATATTAGA AAAGTAGGCG ATATTAATAT TTTCATTGTt TTTGTGTAC TTCAATTAGT 300
 ATAACAAAAC TGTTATGTAT TTATAAATAT AATCATTAGT ATTTTTATGG CTGAAAAAGT 360
 TATAATAAAA GTGTAAGGAA TAAAATATTT GTATGGAAAA GAGAGATAAT TATGAATAAA 420
 10 ACCAGTAAAG TTTGTGTAGC AGCAACATTA GCATTGGGCA CACTGAT 467

(2) INFORMATION FOR SEQ ID NO: 1377:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 128 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1377:

AGGTGTTAGA ATTTATTTTA AGTGTATAC GTGTCTTCCA GAAATTGTAA TGGCATTATA 60
 25 TTTATnAAAG TGTTGGCAGG TTATTTTCAG GTGTATTAGT TTAGGTATCA TTCGTAGTAT 120
 GCTTGGGA 128

(2) INFORMATION FOR SEQ ID NO: 1378:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1378:

GGACGCTAGA GGATCCCGGT CTGGAAAATA TCGTCCAGAA CTTAGAAATA TGAAAATATT 60
 40 CCCAAGACCA ATCGATAATA TATTGCCAAT ATGGCGTGCT GTTGGTGGTC CACCTGCAAG 120
 TGCTATTAAA GCGGGAAAAC AAGGTGTGCC AATGATGATT ACAACCCTTG GTGGCCCAGC 180
 45 AATGAACTTT AAAGGTTCTA TAKATGCTTA TCGTCAAKCG GCAACTGAaG CAGGTTTCTGA 240
 TGCTTCGCCT AAGTCTTTAC CAGTAAGTAC AGCGAGTCTG TTTTATACAG CTGAAACAAC 300
 TCAGGATGCT ATGAGAGAAT TTTATCCACA TTTGAATACA GGGATGTCAT TTATTCGTGG 360
 50 TnGTTGGTTA TCCGAAACAG CAATnGCTAA TTCGTCAGTT 400

(2) INFORMATION FOR SEQ ID NO: 1379:

- (A) LENGTH: 108 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1379:

10 AACTACAACA ATTTAACGAC CAACCTTAAA AnaATACGCT CTTATGCATT GGATTAGTCC 60
 TGATTATACA ATTTAACTGA ACAAATACCC ATCATTTAAA AGACTTAG 108

(2) INFORMATION FOR SEQ ID NO: 1380:

15

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 118 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1380:

25 AAGTGGGGGG AATCAGTATG TTACATTTAC ATATATTAAG TATTAGCGAT TATTTTATTT 60
 ATCGCTACAT ACTTAACCAT TTCAAAAATT CAAGGCGGnT CACCATTTTC CAACCCGT 118

(2) INFORMATION FOR SEQ ID NO: 1381:

30

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 114 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1381:

TCATGAAAAC ATTTATTTTA AAATTTGATA TTTGTTCAAT AATATTCGAA ATTAACThT 60
 40 GTGTATAGAT TTTCTTTATA TCCTGAGAGA CATGTACTAT AATGTTTGTG AATA 114

(2) INFORMATION FOR SEQ ID NO: 1382:

45

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 165 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1382:

CGGTATTGAT CATATAAATA GTGTTTAGAT GCTATAGTCG GnTGACTTAA GTAATTTAAA 60

55

GTTTTCTTCT GCCTTGCTTA AAGATATATG ACAGGGTGCT GGCAT

165

(2) INFORMATION FOR SEQ ID NO: 1383:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 111 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1383:

TTTGGTGTGA TGGAGTATAT TTAGGTGTGG AAATCAAGAG GGAATTCCAT TTTCAAACAT 60
 CCAATTAGAG TCGnAATAAG AACTCGCTAT CGGTCCAATT AACTGATTCA G 111

(2) INFORMATION FOR SEQ ID NO: 1384:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 144 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1384:

CATTTAAATA ACGTTGTGAC CATGTGCTTT ATGCTATGTG CTAGAAAATC CATGTTTTTA 60
 TCTAATTTCT TAATAAATTG ACATTAAGTT GGATTCTTGT CnCTTCACG TTTCGACATT 120
 GGATGACTGA ACGCATGAAA TCAG 144

(2) INFORMATION FOR SEQ ID NO: 1385:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 103 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1385:

TCGTTGTGCA GCAACTGCAT TACGCTGTCT CATTAATGTA AGCGCAATGG CCATTTGGTT 60
 TTTCnATAGT GGAATACTTG TCAAAATTGA ACATTGTATC TTC 103

(2) INFORMATION FOR SEQ ID NO: 1386:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 533 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1386:

5 CCAGnACAAA TACAACGTTA TATTCAACAA TTAGAAGACT TAGnATAGAT ATAAATTGAG 60
 GGAGGACATC GATATGGCAT TTGAAGGGTT ATCAGAAACC TTGCAAGCGA CGATGCAAAA 120
 AATGCGTGGT AAGGGTAAAC TTAAGTGAAGC TGATATAAAG ATAATGATGC GTGAAGTAAG 180
 10 ATTAGCGTTA CTTGAGGCTG nACGTAAACT TTAAAGTGGT AAAAGAATTT ATTAAAACAG 240
 TATCAGAACG CGCATTAGGT TCCGATGTAA TGCAATCATT AACACCAGGG CAACAAGTTA 300
 TTAAAATAGT TCAAGATGAA TTAACGCAGT TGATGGGTGG AGAAAATACG TCGATTAAAn 360
 15 TGTCAAATAA ACCACCTACT GTTGTATTGA TGTTTGGTTT ACAAGGTGCT GGTAAAACAA 420
 CAACTGCAGG TAAATTAGCA TTATTGATGC GTAAAAATA CAACAAnAAA CCTATGTnAG 480
 TTGCAGCAGA TATTTATCGT CCAGCAGCGA TAAATCAATT ACAAACAGTA GGG 533
 20

(2) INFORMATION FOR SEQ ID NO: 1387:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 112 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1387:

30 TTATTTACAA GCCATTAATA TATTTTAGGT TTGTTCTGCA TCGATTCATT GGTGCTATTT 60
 TATTTACATT CAATAATGAG ACTTTTACAn CAAACCAATT GGTCAAATAT AG 112
 35

(2) INFORMATION FOR SEQ ID NO: 1388:

(i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 118 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1388:

45 ACACCTACAG TTAATAGTAT CAGTGCACAC TAAAGTCCTA ATACTTTCAA CCATGACTAA 60
 TGATGTATCh TCTTGCCCAA CGAACGCGTT GTGCCAAATT GAATTAGACT GGACGGAC 118
 50

(2) INFORMATION FOR SEQ ID NO: 1389:

(i) SEQUENCE CHARACTERISTICS:

- 55 (A) LENGTH: 147 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1389:

CGACGACACA ACTTTATAAT AAAATCTTAG ACAATAACGA AGGGTATTAA CAGAACTTGG 60
10 TGCTGTTAAT GCAAGTACTG GAAAATATAC TGGTCGTCGC TAAAGCAAAT TTTTGCTCTG 120
ACCTnCAATG GTACTTGTG GGGAAATA 147

(2) INFORMATION FOR SEQ ID NO: 1390:

15

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 161 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1390:

25 TTTTGTATCA TGATTTTGG GCATGGATCA ATCACTTGCT TGGCCAATGG TCITTCAACA 60
ATTTGGATAT CTGACCTTAT TCGCTTTATC TAGCACTTTT GnCAATTTGT TGGCATTGGA 120
AAACATGTGT TTAGATTTTT GTATGCCTCT CGCAGGCTTT T 161

30

(2) INFORMATION FOR SEQ ID NO: 1391:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 102 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1391:

40

GCCGCACGCG CGCGATTCTC GGCCTAATAA GAAAACAAAT AATTCCAATT CATATATGnA 60
CATTTTTGCC TCCTTATTTT TTGAAAATGT GGAATTGGAA TT 102

45

(2) INFORMATION FOR SEQ ID NO: 1392:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 412 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1392:

55

AAAATGCTAT TAACAACGTA TTAAATAATC AAGATTACCA TGGTATTAAA GATAAACCAT 120
 TCGCATTATT CGTAACTGGA TTTTTCGACA ATGTAACAGA TAATACTGTT GGTATTAACT 180
 5 TTAAGACAAA AGACGGTTCA ATAGCAGTAT TTATGCGTCC AGATATTGGA GAAACATTTA 240
 GCGAGTTTAG AACATTCTTA GCCGTCTTGT TAATGTTGTT ATTATTTATC TCGATTTCAT 300
 TAGTTATCGC ATCAnCCTAT TCAATCATTC GTCCAGTAAA AAAGTTAAAG CTAGCGACCG 360
 10 AACGCTTAAT TGATGGTGAT TTTGAAACAC CTATCAAACA AACnCGCAAA GA 412

(2) INFORMATION FOR SEQ ID NO: 1393:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 186 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1393:

AGCAAnTGGA TTGCAATGAG TTCTTATAT TTACAAGGTG GTAGATTGAT TGATGTTTTA 60
 25 ACTGCGATAT TAGCAGTAGT CTAGATACCT AGTCACTGAG ATTTTAGATC GAGTTACACG 120
 CACATTATCC GATCTGTCTA TATGGATATC CGTATGACTA CCTATCCAC GGACTGCACA 180
 TACTGG 186

(2) INFORMATION FOR SEQ ID NO: 1394:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 118 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1394:

TCTTTAAAAG AATCAGGAGC TTGGAAGAAG TATATCAGGA TCATTAGTC AACAAATTAC 60
 GCGATATGAA AATTGAATA ACAATTTGnA AAAGCATGCT TCCGATAATC AGCAAGCC 118

(2) INFORMATION FOR SEQ ID NO: 1395:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 175 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

GGTTACCTCG GATGGATGAT TACTATTTTG GGCTGGGCGC CGGCTTTnGT TATTAGTGGT 60
 GGCAATAGTG GCAAAGTGTC ACAAAAAAAT CCAATAGCTG GAAACCCGGG TATATTTGGG 120
 5 TATTAACGCC GGTGGCCGGG ATTTGGCCAA TCGCATTAAAT TTAATGGCCA TTGGG 175

(2) INFORMATION FOR SEQ ID NO: 1396:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 132 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1396:

AGAACTTAG ACGATTAGTA TCATATATTA GAACACnGCA CCGAACTTGA AATCATGGCT 60
 20 GATATCGCAC CTTGAAGAAG CAAAATGCC GCACGACTTG GCTTTGATAT ATTGGCACGA 120
 CTTACATGGC AT 132

(2) INFORMATION FOR SEQ ID NO: 1397:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 121 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1397:

AGAGGTCCGG CTATCTATCA AATAAAGTGG TCATTTAAAG CGTACACTTC GGGTGC GTTG 60
 35 ATTTCTTACT TTAGGTGTAG GACAATTGTA TCGCATCTAT CTTTACnCTA CCTGCATTGT 120
 T 121

(2) INFORMATION FOR SEQ ID NO: 1398:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 202 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1398:

CGTTCGTATA ATCTCACTTG CATChTGAAT TGAACAACAT CCTGTCATT TAAGACTGCT 60
 55 AAAnGTACAG CTGAAAACCA AGTAAGTCCG TTTCGTCTGG CTGTGAAATG GATCAAGGAG 120

AAACACCTCA TCCAAAGTTC AG

202

(2) INFORMATION FOR SEQ ID NO: 1399:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 165 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1399:

CGTTGGATCA CTGATGCATT CATAAATGGG TGAACnTAAT GTAATGTTAA ATCTATCACA 60
 GCGCGATAAC AGCAAGAATA TAGTGAACAC CATAAATTGA GCATATCAAT GCCATATTCA 120
 TGGATACACA TAGTTCACCT GGTGGTCGGT GAAAGCCTGT AGATG 165

(2) INFORMATION FOR SEQ ID NO: 1400:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 107 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1400:

ACACCTTTGT TTTTGCAAAG CTGTACCACA AAGTACTGGG TAGAATTCTA CGTTATATGA 60
 GnCTTGGCGT ATAGCTTCTT TTAATTCATA AACTGTAAAT TTCTTCG 107

(2) INFORMATION FOR SEQ ID NO: 1401:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 106 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1401:

TTTTGTCTAG nAACATCTGC TTCTAATAAT GATCGATCAG CAGCCATTGT GCTTAATCTT 60
 TCATCCCACA TCACAATCTC AATAGAAGGA TAAGCTTCTA ATAATT 106

(2) INFORMATION FOR SEQ ID NO: 1402:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 102 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1402:

CAATGTTAAA CCTACACCGT TAACAGCACA CATGATACTA AATTGTTGGG GTGTCATATT 60
 ATACAATGTT GAGTAAATAA TGGCGATGCA GATGAATAAC TA 102

(2) INFORMATION FOR SEQ ID NO: 1403:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 169 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1403:

TTTATTATTT GTGCTACAAC TACTTAAAAA AATCAGTAGA TATAGCATTAA AACATATTTT 60
 CATCCCCyTG AATTTTAAAA ACTTTTTCAA AAGCAACACC TCTAAAAATA AATaCAATAT 120
 ATTATAGCAA ATAGAAATTA TTATTTTGTT AAATTATGTT GTnCATGTT 169

(2) INFORMATION FOR SEQ ID NO: 1404:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 106 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1404:

TTAGTTGATA AGTAAATCCG AGTGACATTG GGATTCACCC CAACCGACTC TATTCCAGTC 60
 TGAAATACGT GAACCCATAA nATCCTATGT CCAGATTATAT ATTTCT 106

(2) INFORMATION FOR SEQ ID NO: 1405:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1405:

TATTTTTCGA GCAGAGATGT TCGCGACAAG GTTTACGCCA AATTGTCACT GCTACTGCGA 60
 TGTGTATTGC ATGCAAGTGC AGGnAATATA TTGAACATTT AAACGATCAG TTTAATTGGA 120

CTTTAATAAG CAATTTGTAC TGA CTGTCGA CATTGCGTCA TGGTCTGTTT TTGTTTAACT 240
 ATACTATnGG TGC GAAGTAG GCCTATGTTT AGAGGTCTAA CATGCCGTAG GTCTAATGGA 300
 5 TCAGGAACC 309

(2) INFORMATION FOR SEQ ID NO: 1406:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 144 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1406:

GTGGACCTGC AGTTAATTCA ACGATTTC AA GATGGGCGCC AAGAACGAAA CGTGGCCGAT 60
 20 ACTTAGGATT CTGGAATCAT CACATAATCG TGTGCATGAG GTGTTTCACT TTGGGGTCTA 120
 ATGATTCTTC ATGGAAnGTA TAGG 144

(2) INFORMATION FOR SEQ ID NO: 1407:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 115 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1407:

ACCTTTGCGT CCAGAATTAG CTACATGGTA AAGCTTCGTG TTACTATTTT AGGGATATCT 60
 35 TCAACnCGTT TCACTTGTAT AATTTGTTTT TGTAATTGGT GAAGTCATAG TATAG 115

(2) INFORMATION FOR SEQ ID NO: 1408:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 115 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1408:

ATTGGTATTG GCGCTGTAGT ATAGCTTCAT TATCTGATGC CATTAGTATA CGCACACTnT 60
 50 TTATTTATGG GCGTGGTATT CATCCTTATC GGGATCAATT ATTGGGTTAC ATTTT 115

(2) INFORMATION FOR SEQ ID NO: 1409:

(A) LENGTH: 123 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1409:

10 AACCAGATGa AAAGCAAATA TACATATATA ACTCTACATG GGGTCGTGGT TTGGATATTG 60
 TTCATGATGC ATTCCGTATG CCAATGACAA AGCAATATAA AGATAAATTn CAAGAAGATA 120
 AAA 123

(2) INFORMATION FOR SEQ ID NO: 1410:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 120 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1410:

25 CTnTTTATAT TGAGGATTTT GTATCATATA TGGATAATCA TTAAAGGTGT ATGCTCTTGT 60
 TATCAGATCG CTACGGGTAA AATCGCTTCT ATAGGGCATT TACATGCGGG CTTCTGCCGG 120

(2) INFORMATION FOR SEQ ID NO: 1411:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 455 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1411:

40 TCTCGTATTG CGTTTAGAGA ACATGCGCAC AAAGGACAAA TTCCAGGTGT TAAAAAATCA 60
 AGTTGGTAAA ATCAAATTTC GTACTTTAGC CCATTTACAA TATCAATAAA ACAATGTACA 120
 GTATATACGA ATGCTATAAA CTGAATGTTT TCTCATATTA ATAAGGAAAC ATTCGGTTTT 180
 45 TAATTTGCAT TAAAAAATAA TTAGTTTTTA AAGGGGCTAT TTAAAGTGAA AATATTTGAT 240
 TACGAAGATA TTCAATTAAT ACCTAATAAA TGCATAGTTG AAAGTAGGTC TGAATGTGAT 300
 50 ACAACTATCC AATTTGGTCC GAAAAAATTC AAGCTACCTG TAGTTCCTGC GnATATGCAA 360
 ACAGTTATGA ATGAGAAATT AGCGAAATGG TTTGCTGAAA ATGATTACTT TTATAATCAT 420
 GCATCGTTTT GATGAAGAAG CAAGAATACC TnTTA 455

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 118 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1412:

ACAATGTCAA ATCACAATAG CTGTTGTAGG CATTGTGATTA CAATGAACTA AAGGCAAAAT 60
 TGGAGCAGTT ATCCATGAAT GATTAATAAC AACAnAAAGT ATGGGGTCAA GTTTAGGG 118

(2) INFORMATION FOR SEQ ID NO: 1413:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 245 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1413:

TGTTGACGAT ATAGGAATTA GCAAGAAATA GGCTAAGATA GTTTCGCACA ACTTGGGGCC 60
 CAnCCACTTG CTGTTTTGTA GAATTAGGGG TCCATTTCTC GTGTTGGGGC CCGAACTAAT 120
 AGTATGAATA TATATATCTA ATATTAAAC GGCAATATTT ATATGGTATA CATTTTTATA 180
 TTTAGTnTTT GTATAGACAT GCTAATTAGC ACTTTCTAAA AAGGGTTGAA ATGATATACT 240
 GATGA 245

(2) INFORMATION FOR SEQ ID NO: 1414:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 252 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1414:

TTTTTGTTAT TCAAAATTTA GAGTGTGTTA TATGATAACG GTTTTTTCAT AGCGACTTGA 60
 TCATTTTTTCG AAATGATGAA AGATATGCAA GTTCAATCAA TCGGAACAAA AATACTATAT 120
 TATGGTAAGA AnTTCCCGAA GACTAGCGCA CTCACACACA AGTGCATCCT CGCGAACAAT 180
 GCGCACTTTT CACAAGCACA CAAACACAAG GCACAAGTGC ACGCAnTATT AGACAATGGT 240
 CTACCTACCA GA 252

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 112 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1415:

ATCTGCTGGA AGAGAAAAAA GACGCTCTTA AAAGTGGCTT TAGAAGGTCA AGATATAGAA 60
GnTATTAAAT CTAAGAAAAGA AGGAAGTTGA AAAAGTGATT CCAGGAATTT TC 112

(2) INFORMATION FOR SEQ ID NO: 1416:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 124 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1416:

CTCAATTACA TTCAAGAAAA TGGGTGGAAT TACACAACGT TGGACTGAGA AGTATAGTTA 60
ATAGCGCAAA TGCnATAAGC CTTATATAAA AATGGGCACA ATTATTTTCAT GTACCAACAA 120
GAAC 124

(2) INFORMATION FOR SEQ ID NO: 1417:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 121 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1417:

TTCAAGAGCA CATACTGTAA CTCGTACGAG AATTTTTTCA AAATGACGCG TCAATCTCAA 60
TATCATCATA TGGTATTCCG AGTAATACCC CTCGnCACCT TTTTtaggTA GCGTCAATAT 120
T 121

(2) INFORMATION FOR SEQ ID NO: 1418:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 123 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1418:

CTACGCCATC AAGAGGGTGT TAGTGCTATT AACTATTGCG GCGAGAGCAA TTAGTCGAAT 60
 5 GCAAATTAGG ACAAGTTGAT GAGTAACTAC nGCCAATATC GGTAAGTTTC ATGGCGGTTC 120
 AGC 123

(2) INFORMATION FOR SEQ ID NO: 1419:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 109 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1419:

CTTATAATCC TTACnGCAAT TTCACCTTGT ACGGAATTAA ACAACGGAGG CATTTACTTA 60
 20 CCCCCTTTAC TTAATACGTA CCAAAACTTG GTCGTATTCA ACCATTGGG 109

(2) INFORMATION FOR SEQ ID NO: 1420:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 121 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1420:

GCTGTnGTGC TGCCAAGATG CTGATTGAAA AGTATATATG ATTGCATCAG TAGAAGAGCG 60
 35 AGCAGAAAGA AGATATAAAG ATAATCAGTT AAGAGGTGTC GAATCAAATT TTGAAGATTT 120
 A 121

(2) INFORMATION FOR SEQ ID NO: 1421:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 128 base pairs
 (B) TYPE: nucleic acid
 45 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1421:

TGTTTTTACA GTCACATACA CTAGGCATCC TAGCATTATC TAAATTAAAT ACCATCGCAA 60
 50 CTTGCGCTTT AATCTTCAAG GCCAATTAAA CCTCCTTCAT CTTTCTAACT GCTTAnATAT 120

(2) INFORMATION FOR SEQ ID NO: 1422:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 110 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1422:

GCCAATCATT GTCAATGTTT AGGCATCAnA TTTATCGAAT GATTTTCATT TGCCATGATC 60
 AGTCAAGGCG GGGATTTATT CAAAAATTAT GACGCCTAGT AAAAAATTTT 110

(2) INFORMATION FOR SEQ ID NO: 1423:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1423:

ATTACCTTGC ATGAATTTCC ATCTGTCAAA TGTGCGCCTT CACGAATTTG TTCGATAAAG 60
 ATACGTTGGT CACCGTGAAT AATTTACCA GCTGCATTTn TCCATGGACC A 111

(2) INFORMATION FOR SEQ ID NO: 1424:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 200 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1424:

TGTTGTGTGA TTGCGTATTC TCAGGTGAAT TCTTACATAT ATAGTACTTT TTGTTTCCGC 60
 TTGATTTGAC CTTGCATATC TTTCACATTC TTCGAAAATT GATCAAAGCn CTATTGAAAA 120
 ACCGTATCAT ATACAnACCT CTAATTTTTT TGAATAACAA AAAGAATTCT TTGACGTATC 180
 AACTATATCA TCATGACTTC 200

(2) INFORMATION FOR SEQ ID NO: 1425:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1425:

5 TTTCTATAAT TTTAGACTAT TTCTACCATG TTGCTGAACA ATTTACTTAG ATAAAAATTA 60
 TnAAATTTTG GTCAATTAAC AAAGTTAGTT TGTAAAAACG TATACTTTAA TTATTCCGG 119

(2) INFORMATION FOR SEQ ID NO: 1426:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 116 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1426:

20 AAAATGGCGT TGCATTTTAC TCTAATAACG CTCAAGGCGA CGGCAAAGAT AACTAAAGG 60
 CACCTATTAT CGAACATAGT ACTCCTAnCG GACCTGGAAT TTAATCAGA GCGGCC 116

(2) INFORMATION FOR SEQ ID NO: 1427:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 212 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1427:

30 TTTTATTAC GTATAAGTGG GCGTTAGGTG TCACAGCGGT TGTCGATCAA AATATCATCA 60
 35 TCAATCTTGT ATATGGGTTT GCGGATTCTT ATTTTATGAT TTTACAGAAC TATCCTAGGC 120
 TTATTCTTTA TTAAGATG CAACnAGTTA TATAAAAAGA CGAATCTATC AACGCGAGCT 180
 40 GCTCACAAGG CATCTCnTAT AGCGTCCACA TC 212

(2) INFORMATION FOR SEQ ID NO: 1428:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 265 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1428:

50 GAAAAATTGG TTCTGAATAT AATGGTGCCG TATACTTTAC GCCTCAAATC AAAGATTTTA 60

ATTTTAATGA AAAACATCGG TCGAATATAA CATAAAAAAA CGTCTATATC AAAAGCATCA 180
 TGAATAAACA GAGGAGCACA AAAATGAnTA AAAATATAAT CATCAAAAGT ATTGCGGCAT 240
 5 TGACGnTTTT AACATCAATA ACTGG 265

(2) INFORMATION FOR SEQ ID NO: 1429:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 145 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1429:

CGTACGAAGG ATTTGCAAAC TTCTTCATTC AACAACTAA AGAAGAACGT TTCCATGGAC 60
 20 AAAAGATTTA TAACTATATT AACGACAGAG GTGCACATGC AGAATTCAGA GCAGTTTCAG 120
 CACCAAAAAT TGACTTTTCA AGCAT 145

(2) INFORMATION FOR SEQ ID NO: 1430:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 115 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1430:

ACACCGCTAA GCGTATTAAG ACAGGATCTG AAAATGGACA CATCGCAATC GAATTATTGC 60
 AATGCCAAGT CATATCGGGG GTGAACCGCA ATTCAGGnA TTAAGTGGAT AGGTA 115

(2) INFORMATION FOR SEQ ID NO: 1431:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 211 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1431:

nATGTATTnG TGAAAAGGTC CTGAGTGGAC AAAAGACCTA AATATTTAAT GGTGATTAT 60
 CGCACGTCCA TAGTTGGTGA ACAGGAACTT ACACGTACAT CTAATCGCAG ACTATGCGTA 120
 AACTTTGGAA ACTGCTAGTC ATTGAAGCGT GGTATGTGTA TGCACGTAAA TATGCATTAG 180

(2) INFORMATION FOR SEQ ID NO: 1432:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 145 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1432:

GGAATGATTG ATAAATTGGA CTACTTAAAG ATTTCCGGTAT CGTGTCATTT GGCTCAGTCC 60
 ATGTTTAATC ACCTATGnTG ACATGGTATG ATATTAGTGA CTACCAGAGA TATGGATGAT 120
 TTGGAACGTG GAGGACTTGA TCGTT 145

(2) INFORMATION FOR SEQ ID NO: 1433:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 169 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1433:

TTTATTGCAT TTACATAATA ATATCCTTTT GTTGTTTTGG TATTTCTATT CATATACAAG 60
 ACCATACCTT TAACTTTCAG AGCTTCCCCC TTATTTTGAG TTGCCATTTC AGAACCAATA 120
 ATCCATGTAC CTTTATCATT TTTATCAAAT TCGTCATCAC GATAACCTn 169

(2) INFORMATION FOR SEQ ID NO: 1434:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 102 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1434:

GATCTATAGT TCTGTAATCT GACGTGCTTT GCCATGTGCA CCACTCGTCh TAAAAATCAC 60
 TTACACTTAA CCCTTTTCCA CCTTTATCGT ATCCACCTTC AA 102

(2) INFORMATION FOR SEQ ID NO: 1435:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 116 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1435:

TTCTTATTAT ACAAATAGAA GCCATGTGTG CTTATATCGC AGCATCATGA CTCCTTTTTC 60
 ATTTGAATAT ATAAATAATA CAGnCGCTTT CGAATAAATT TAGGCTAATT CTACCA 116

(2) INFORMATION FOR SEQ ID NO: 1436:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 144 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1436:

GGGGGTTTAT GTACTGGTGG ATCTGCAAAC TACTTGGCGT AAAGAATATA CAGATATGGT 60
 AAnGAAAAGT TTAGATTCAC ACGCCATCAC AATGGATTAG AAAAACCGAA TTTCTTCAGC 120
 AATTCTACAA TTTCTAGTAT ACGC 144

(2) INFORMATION FOR SEQ ID NO: 1437:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 101 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1437:

GTTGCTGGGn AACCTATGGT CGAACATGTA TTGGTAAAGT GTGAAAGGCT CTGGTGGCGA 60
 TCAAGTTGGT AACCATCGTA GTACATGGTG CTGTAAATGT A 101

(2) INFORMATION FOR SEQ ID NO: 1438:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 321 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1438:

AAAGATGGTG ACATTTTCATA TAATCCGAAT GTGCCAAGTT ATTCAGCAAA GTATCAATTA 60
 AGTAATGATG ACTACAATGT GAAGCAACTT AGAAAGAGGT ATGATATACC AACTAnGAAA 120

AATTTAGAGT TTACATTTAT AGAAAATAAA GAAGAAAACA TCTATTTTAC GGATAGTATT 240
 AATTTCAAAC CTAAGAATA GGGTTAATAG AAGTTTGAAA TGAAAATTC nTAAAGTGTG 300
 5 CAAAATAATT TGTCGCTTTA G 321

(2) INFORMATION FOR SEQ ID NO: 1439:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 135 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1439:

CAGTTGTAAT GGGACCTGGG CCAATCGGAT TACTTGTAGC ACAAGTGTTA AAAAGTAAAG 60
 20 GCGCAACTGT TGTGGGTACT GGGTTGGGAC AATTGACCAA GTCAGATTAG ATTAAAGCCA 120
 GAAAGCCATT GCCAC 135

(2) INFORMATION FOR SEQ ID NO: 1440:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 110 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1440:

AAATTATTTT GAACACTTTA TGAAATTTTT ATTCAAACCT TCTATTAACC CTATTCAGTA 60
 35 GGTTTGAAAT TAATACTATC AGAAAAATAC ACATTnCTT CTTTATTCTT 110

(2) INFORMATION FOR SEQ ID NO: 1441:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 436 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1441:

TCTCTTTTGG ATTCATTAAG ATTGChGCAT CGATACCAAC GTTmAACGGT GATTGTGTAA 60
 50 TGAATTTTTG CCACCAAGCT TTTTAAACAT TATTCTTTAA TTCAACACCT AAAGGACCAT 120
 AATCCCATGT GTTTGATAAA CCACCGTAA TATCACTACC AGGGAACACA AAACCTCTGT 180

GAAAACGCCC CATGGAAAAT AACAGCATAG TAAATATGCT TTA^{CTT}CCAT GGGACGAGTT 300
 AATATTTTAA ATTGTATATA ATACAAA^{AA} AGTⁿACGTAT TTAACCCGCG GTTCCACCCA 360
 5 AATTAGTGTA GTCACTCGCT TTTATTTTAA AATGATTCGT TCGCCAATC TTATTGTTAA 420
 GCTTACACTA TCCTTA 436

(2) INFORMATION FOR SEQ ID NO: 1442:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1442:

20 ATTTT^TAGAA GCATACTGCG AACGTCATCA CATCGATT^A CATATCAAAA AGTTAGATT^T 60
 GTCGCATAGT CTCGACCGAA ATAACAGCAT TCAGAATGAA GCTCGAATTA AACGTTACGA 120
 ATGGTTTGAT GAAATGATGA ATGTATTAGA AGCGGATGTA TTGCTAACGG CGCATCATTT 180
 25 GGACGATCAA TTAGAACTA TTATGTATCG TATTTT^TATⁿ GGGAAATCAA CACGTAATAA 240
 ACTAGGATTT GATGAGTTAT CGAAGCGAAA AGGTTATCAG ATTTATCGAC CACTTTTAGC 300
 TGTCTCTAAA AAAGAAAT^A AACAA^TTCCA AGAGAGATAT CATATTCCAT ATTTTGAAGA 360
 30 TGAATCⁿAAT AAAGATAACA AATATGTTAG AAATGATATT CGTAAⁿAGAA TTATTCCAGC 420
 TATTGATGAA AATAATCAAC TTAAAGTATC GCATTTATTA A 461

(2) INFORMATION FOR SEQ ID NO: 1443:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 143 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1443:

45 AAAGGTGATA AAAAACAAG GCATTGTAA TTA^{CTT}GTAA ACCAAGTGAG TTATTACAG 60
 ATTCTAATTG GGATAATGCG CGATATTTTA TTCCACACTT GTTACATTAT TGCTTTACGT 120
 50 GGGGGTTAGC GTGGANTCAT CAC 143

(2) INFORMATION FOR SEQ ID NO: 1444:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 90 base pairs

1743

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1444:

TGGTGTGGT TCATCAGTTG TAAACGCGAT TGTCACAAGA CTTAGAAGTA TATGTACACA 60
GAAATGAGAC TATATATCAT CAAGCATATA 90

(2) INFORMATION FOR SEQ ID NO: 1445:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 218 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

15

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1445:

ATTGAACAGT GACAACAAAT GACAACAATG AATGACCAAC TGAGTTGCAG AATTGACCGA 60
CCTGACTTGC TGTnAGATGT GCATTGCCTG TGACCACTTA ACTGCTGTTT GTACATTATG 120
ATTGTGCACG TGAAGTCTTT GCAAATGACT TTAAACATTA TGCTGCTAGA GCCATCTTTT 180
AAAGATGTTT GGAATAACGT nCATGATGTG AATATCTG 218

30

(2) INFORMATION FOR SEQ ID NO: 1446:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 105 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1446:

TTTGACTTGA CATTATAGAA CACAAATTCA TTTGAACTA TGTTTTCAAA TTTATTTATT 60
GTTACTGGGA ATTTACATT ATTAGATTTA TTTATTTTCT TTTGA 105

40

(2) INFORMATION FOR SEQ ID NO: 1447:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 104 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1447:

55

AGACTGAAAA CTGCATATGC AGAGGCGATG AAACAAAATG CCAT

104

(2) INFORMATION FOR SEQ ID NO: 1448:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 104 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1448:

TTGAATTAACTGAAGAATA GCAAGTCAAG CAGGATTGTT GATATGACAA CATTGAGTC 60
 AGAATGGCAA CAACAACGTG ATTCGTGCAC TCCAAGCAGC TGCA 104

(2) INFORMATION FOR SEQ ID NO: 1449:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 349 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1449:

TATTAATTTT TTTAATATG GAATATTCAT TGCATCGCTT TCCTATTCTT CAAGCCCCACT 60
 TTTTATCTTC ATATACATTA ATTAACCACC kTCAAACATT GTCGTTAGAT TCGCCAAATT 120
 GAATCTATTT TTAGCACAGC AAAAAACCGA ACTGCTGAAA TAATGCATCT CCAACAGTCC 180
 GGTCTATTAA ACTATTTACT TATCTTTATT AAACAATTGA CATGATTIAT TAGAATAACC 240
 CAATTGGCAT GACCATGCAT CAGTAACATC CATGTTTAAT GGCTGCTGGT TTTTAGGTA 300
 AACCAGGCCA GAGTCATGGn TGGCACCTGn GCAACGChAC GATAAAGCC 349

(2) INFORMATION FOR SEQ ID NO: 1450:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1450:

GATTTTATAT AAATATAGCT TTTCAACAAA ACAAATGATT GAATTTCTAG GAATTGAGTC 60
 ATTAAAAAAA CACTTGAAAA ATTCAGGTGG GATTGCGCTA TTGCCGGAAT TTATTGTTGC 120

AGAAACAACA TTGataATTA ATCCTGAATC GAATAAGCAm GTACTTGAAT CTTTTGTAAA 240
 AGATGTTTTT TTATAATTAT TGGTGAAAAC GTGTAGTTAT GGTGAAACTC AAAGATAATA 300
 5 ATTTAAATGA GATGTTAATG AAAAAGTAAT TCAATATAnA ACAGGTGATT TAnATCTTAA 360
 TAAGGnTAAT TCCAGGTGA ATTCCAATTG CGGGCATCAT 400

(2) INFORMATION FOR SEQ ID NO: 1451:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 124 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1451:

20 TCGTTATAG TTGCTATTCT CAATTATGTT CGCGATAATT TTAAGTAAAA GTAAGCACAG 60
 ATATTGAATT TGATAGGAGT TAATTGATAT ATACATACGA ACTTTCATGG ATCACTTAAA 120
 TThG 124

(2) INFORMATION FOR SEQ ID NO: 1452:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 126 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1452:

35 TGTATTAAAA ACCTTCCACC TTAAAAGCA ACAATGCGGT GTCCTTTAAA TTCAAACATA 60
 ACCATATACG AATTACTCGA TAATTCTGTG TGTTTAATTG ACAGATGTCG TGTGAATTGA 120
 40 ThATTT 126

(2) INFORMATION FOR SEQ ID NO: 1453:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 280 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1453:

50 ACTTTGGCAA CATCTGGAAT ATCATATAAA TCAAGTAACT TACCTAACCG ATGATTAATA 60

CTAACAGTTG TTTCCATGCC TACACCTCAC GATATTATCA CTATTCATAT TAACATTATA 180

TGTAAGAAAT TAAAATCTTT TGAAGCATTa AGATTACTTA TCATTThTAA ATTTCaATTT 240

AAACTAACAG TAATTTATGT AGCTTTTGna ATTCTCATAA 280

(2) INFORMATION FOR SEQ ID NO: 1454:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1454:

ATATTCTTTA AATTAAACTG ATCACTTGAA TAATTAAACAT TACTTAATTC TATGGCATTc 60

ATGATGATTc CTCCTCATAA ATGAACGTTa AAATATCCTG CAGTTCCTCA AGTGACATTT 120

CGATGGCTTG CGCTTCATTa ACCAATTCIT TAACCAAATT TTCAATGGTA AAAAAATTGTT 180

TCTCTTTTAA AATAGGAACT ATTCTThGCT CCTTAACAAA GGnCCCTTTT CCTCTAATTG 240

TT 242

(2) INFORMATION FOR SEQ ID NO: 1455:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 110 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1455:

ATAAAATTGC AGACTTAGAT TACTCTTGTT CAGCATTTTT AATGTATATC GGTATAGATA 60

TTGATGTGAC AGATCAAGTG AGACTTGCAT AntGGTATTT TATTCAGATG 110

(2) INFORMATION FOR SEQ ID NO: 1456:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 551 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1456:

ACCAAGTGGTT GCCTTTTTTAA GTCCCGCGTG GGACAAAAAT TAACCTCTTT ACACTTGCAA 60

AAAGCGCTTG CAATATATTT TCGATTGTt ATTCAACmAA ACGTTTTATT tTATTCGCTG 180
 TAGTCAAATG TATACCCTTA TACTGACTCG aTAATCATTT GCTTATnATT TGAGActAGG 240
 5 ACATAAATcA ATGCTCTAGA ATCCAAAAAG TCACATTAGT AGTAGTTAAC CGAACGAAAA 300
 TGCACTTGTA ACAAGCTTTT TTCAATTAAA GTCAGGGGCC CCAACATAGA GAATTTCGAA 360
 10 ATGAAATTCT ACAGGCAATG CGAGTTGGGG TGGGACGACG AAATAAATTT TGCAAAAATA 420
 TCATTTCTGT CCCACCTCAC TCAAAATAAA TTTCACTATC CGTAAAATAA ACAACTAACT 480
 ATTTAAGTAT CATCTCTCCC CTAATTAACA ATTATAAAAA TAAGAACCAA TATTCGAGAC 540
 15 AACCTAATTA A 551

(2) INFORMATION FOR SEQ ID NO: 1457:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 109 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1457:

ATChGGGGCT GCATAAGCGA TATCAAGTGT GAGCATTGAA CGATTCAGGA CTGACCAGCA 60
 30 CGCCGTTTGC CTGCTTTGAA AGATCCACCG ACAAATCCGC CAACATCGT 109

(2) INFORMATION FOR SEQ ID NO: 1458:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 112 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1458:

ACCAGAGCCT CTTTGACTTC CTAAGTCGAA TAGCATCGTT GATATAGTTA AAGATGACGC 60
 45 TAGATTTAGn AATCCAACT CATAACACCT CCACCATTCC ATCACATCTG GA 112

(2) INFORMATION FOR SEQ ID NO: 1459:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 224 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

CCCCAACCAA TTTTTTAAAA AAGGGGGCCT TTGGGGGGGC CAACCAAGGG GGAACCCCTT 60
 AACCCCAATT TTGGCCAATT TTAAAGGGAA GGCCTTGGA CCTTTTGGG AATGGGCCGG 120
 5 TTTTAAACCC TTGGTTTCCG GAAGGGGAAA ATTTTAAAA AAACCGGAAT TGGTTGGCCC 180
 CCTTTAAATT AAAAGTTC CTnAAAAAnA AATCCCCCA AGGG 224

(2) INFORMATION FOR SEQ ID NO: 1460:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 135 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1460:

20 TTTCGACAAT CAATTCGACG TCAGTGCCAC TCCATCTATA GTAAAGCGTT GATACTTTCA 60
 ATAATAACTG GATCACTGTC TAATTATAAA TGGATTCTTA CATCCACCA TAATAATTn 120
 CATATGTTCA TCACC 135

(2) INFORMATION FOR SEQ ID NO: 1461:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 114 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1461:

35 TTATAGAACC TCGTACTCCT nTCGACACTT GAATTTAAAT CAGAGCCGCC AGTGGAGAAG 60
 CATGAATTGA CTGGTACCAC TCGCAGAAAG TAATGATTCT AAGCCACTTG ATTA 114

(2) INFORMATION FOR SEQ ID NO: 1462:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 105 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1462:

50 GTTGAATTGT TGGTGATGTG GTTACACGAA TTTCGAATAA TTGTTCTTTA CGTCAAAAACG 60
 TATCGTTCCA AAGTAATCCC CnGGTAATAG TTACCAACAA GTTCA 105

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 162 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1463:

TTGTATGACT CTCGGACTT TGGTAAAATT GTGAACGCTG GntGAATGAT TTTTGTTTGA 60
 CAATTGGCCT TATCATCATT AATCGTATTT TTAAGCTGCT CGGATATAAG TTCTCAGCGA 120
 GTTCTTTTTG ATGTATCATT AGTGTAGAAA ATAGCTGTTT GT 162

(2) INFORMATION FOR SEQ ID NO: 1464:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 103 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1464:

TAAATTGGAA AGTCACATTC AAnATGCGAA AATGTTTTAA AATGTCCTGT AGGTGCTTAA 60
 TAGTTTTGCA TTTGCAAATT TTA CTGAACC GGTTTAAACG AAT 103

(2) INFORMATION FOR SEQ ID NO: 1465:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 153 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1465:

AAATTGTATA ACTACCAAGC TTATATGAAA TGGTAAACAA AATATTATCA CTTGTTTGAT 60
 AAGTAGCGTG GAAATATTG TATCTTTCTA AATGTACACG TTAGAantCA TGCTTATGTA 120
 TTACACGCGG GGCACTGGTA CCTAAGGGCC TAT 153

(2) INFORMATION FOR SEQ ID NO: 1466:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 124 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1466:

TTTCAGTAAC ATATGAAAAC TTAATTAACG ATGTTTCAGTA GGTTCATACA TTTTACTTTA 60
 5 TGATGCTTAA TTGAATTACA nTTAAGATAT GACCAGCTAA AAAGAGTTAA TGTGATATTT 120
 AACC 124

(2) INFORMATION FOR SEQ ID NO: 1467:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1467:

20 AAGGAATTAA GTTTGCGACA CCAGCAAATA GTACTAATAA AGGAATATAT GGTAAGTCAA 60
 TAATTGAATA ACCGATATAT AAGAATATAC CTAAAATAAC ACTGACAGTT ACTTGACCTT 120
 GAATGTAAGA TTTTAATGTA AAGTTTAAAT CAGTTAATAA ATCTACGAAA AATACTTTAC 180
 25 GTTCACCTTT GAnAAAATTA GCAACAGCTG GGATAAATTT TTCATGGTCT TTTAACATAT 240
 AAATTAAGAA GAATGGAACC ATAATCAATA AGAAGATGGT TGAAATTAAT GATGTAATGT 300
 30 ACTGTAATGA ATTAGATAAn ATATTAGnAA CGCCATCACC CATTGATTTA ACCA 354

(2) INFORMATION FOR SEQ ID NO: 1468:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs
 35 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1468:

40 TGCAAACTAG GAACAATAAT GTTAATATAA CTATGATGnA AGTTAAAAAA TAAAAAGGAA 60
 45 CACTCTATAA TATGAATTAG GGTTTACAGT TTTTGTAGTA TTTTACAGTA TCAAAGTTTA 120

(2) INFORMATION FOR SEQ ID NO: 1469:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 476 base pairs
 50 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

TCTAAATGCT GACTAAAACT AGCAACACGA GACTCATTAT TATTAGACAC GATTGTAATA 60
 GTGATTCCCTT TTTCATTAGC TTCCTTAAAC CATGCTTTAA CACGTTCTGT AGGTTCTTTA 120
 5 ACATCCCAAC CTACTAGCGT ATTATCTAAA TCTGTAATAA TACCTTTAAC GCCTTTGTCC 180
 ACTAACTTGT CTAAATCAAT TTGAAATATT GATTGAACAT ATGAATTCGG CATAAAAAAC 240
 10 TTGCGAACTA AACCATTTA ACTCACCTTT ACCTTTTAT AATTGAGACA CTAATGCTTC 300
 AACAGTTTGA CTTGATGATA CAGCTGCTTT TTCTAAAAAT GCTTCGAAGC TCATTTCGCG 360
 TTCTCCATTT GCTAAGTCTG AACTGCACG AACTACAACA AATGGTACAT TAAATTGATA 420
 15 ACATGTTTGT GCAATTGCAG TTGCTTCCAT TTCAACCGCC ATCGCATTG GAAATG 476

(2) INFORMATION FOR SEQ ID NO: 1470:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 156 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1470:

CACCATACAT GGGTAAGGAT ACTACTCAA TCAACTTGAA ACCAATAATn CATGACCATA 60
 TGTGTGCCAA TGAATTCAAT TGGAAGACA ATGATGAGAT ACTATTAAAA CGATTATATT 120
 30 TATTGTCACT TGTTCAAACG CACTCCTTTT CCAAAAT 156

(2) INFORMATION FOR SEQ ID NO: 1471:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1471:

AACAAAAGTT TTGAAAAGCC GGGTGCCAGC GAAAACCTAA AAAGCACTTT ATCAGAAAAA 60
 45 GCTAAGAAAA AAGATTAATA TTCATTCAAT AAATATAAAT CCAATTTAAT TTGTTGTTTA 120
 AGGTCTACAA GTGTATGTTT AATATACAAT TCATCGTTTG ACGGTAAATC AGATACTTTG 180
 50 AAATCTTGTC GCTCAACCTC TAGTAAATCG AAATCGCTAC CAGCTGAATT ATAGGTTTTA 240
 AGTTCACCCT CTTCAATGAT TCTGTTTTCA AAGTCTTTAA TAACTATAAA TACTGGTTTA 300
 CCGTTGTTAT TAAACAACCT GTCTCTTTTG TCTAATAAGC TTATACAATC CAAATTCATA 360

(2) INFORMATION FOR SEQ ID NO: 1472:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 106 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1472:

CTAGGATTnC ATCTATTTGG GATGAAAATA AGCGTTTCCT GAATCCACAA GAATATCCAG. 60
TCGATTTAAG CCAGGCATGT TGGGGTAATA ACATAACGTT TTTTGA 106

(2) INFORMATION FOR SEQ ID NO: 1473:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 117 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1473:

TATCTTACCT ACATTGTTAT CTGATGGCTG TAATCATTAA ATCTATAACA CCGAGTTCTT 60
CCATTAAATTT TCAGCTTCAT TCGACTGCCT TTTTATnTTT CGTACTATTA CGAATTT 117

(2) INFORMATION FOR SEQ ID NO: 1474:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 164 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1474:

ATGCATGGCA CTGGAAnCAG CTGGGAGATA TAGGTAGTAT CCTAAAGAAG TTCAGTTAAT 60
CGGAGCGATT GTATTGCATG AAGGTAACAT TCGCGAGTGC CAACAGGCCA AGTAAACTT 120
AACGGCAACC ATGCCTTATA TTAAATGCCC TTCCGGGAAA GGAC 164

(2) INFORMATION FOR SEQ ID NO: 1475:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 210 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1475:

ACAGCAAGAC GTGACAAATC AGATACTATT AGTCATCAGC GTTAACATGT GGATAnGTGT 60
 5 GAGGTACGAA TAnCCGAAAG GAAATACGAC CTTTAACATT CGCGCACAAA ATGAGCTCAG 120
 GCGCCTGCCT TGCCCATTTT TTAAATTATT TCCCTGGAAA TGATTGCTG TGTGCTGTTC 180
 10 TGTCACAAC AACACGATTA ATGCCATGAC 210

(2) INFORMATION FOR SEQ ID NO: 1476:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 128 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1476:

AGGGTGATTT CACGGTTCGT CTGCCCATT TATTGCGCAT TTTGCACACC ATCTACCGTT 60
 TGCAATTTTG GTATTAATTG TTGCATGCAG TACTGTCCGT TGACTTTGnT GCAAGTGCAT 120
 25 GCTCTTTC 128

(2) INFORMATION FOR SEQ ID NO: 1477:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 641 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1477:

AAAATCTGGT AAAGTAACTA GAGTTTAATA AATATATTGC ACATAAAAAA TGTGACCTTA 60
 40 TGTGGAGGAC ACATTTACTT AAGAACTAAG AGCTCAACCT CTTAGTTCTT TTTTGTAC 120
 CAAACAATAC ATAATGGTTC ATAGTGAAAT TCGAACTATC AATATAATTT GGTTAATACG 180
 TTTAATAATG GTTCTCTGTC AAATTGGACT TATGGGTCA ATATCGATTT TGGCACATAA 240
 45 ATCAATGTAC TAGGACCTAC AATTTTCCTT TCAATAATAA ATCAGCCAT AATCTTCATT 300
 AATTACAGCG TGATTCATCT ATTATTATGT TATAAATkCT ATCTATAAAC GTCACTTTAT 360
 TAAATAACTC ATGCACTTTA TTAAAAATCC TCACAAATTT GAATATACTT AATTAAATC 420
 50 TGTACTTCTA ATTTGCAAAA TCAACCCATC ATGTACAGTT ACTTTGCTT GCAAAGACTC 480
 AATTTTCATT GAAATAGTTA AAGTAGAACC TATATnAAGC ATTTGTCTAG CTAAATTATA 540

GATAACTCTT ATCTTTTTCa ACTGTAGGTG ACCTTTAGGG C

641

(2) INFORMATION FOR SEQ ID NO: 1478:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 121 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1478:

TTAACCGTGA TGCAGAGTAG TAAGTGGATn CATGCTCTGT TATGGATGAC AAGACAAAGC 60
 AGCGAATATT GCGTACTGCG ATTGATGAGC AGATGCATAT GATTGGATTG GTGCAGCTGT 120
 C 121

(2) INFORMATION FOR SEQ ID NO: 1479:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 133 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1479:

ACCATTGCTT AGATAAATAC CTCGCAGTGA ACCGCATTAG TATAGCACTT CTAGCTGATC 60
 GCATCAGTAA AGTATGCTAT TAATGTCTCA GTTTTATCTG TAATGCATGT TTAAGTTAGT 120
 CATAGCATTa Ttn 133

(2) INFORMATION FOR SEQ ID NO: 1480:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 201 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1480:

TTTTGGGGnT TTTAAATTTT AAATTCCTGn TGGGGGAAAT TCCCTTAAAA ATTCCCAACC 60
 CTTTAAAGGG GTGGGGGTTT TTTTAGGGAA AAAGGGGCCC GGGGTTAATG GTTCCCAAAA 120
 AATTGGGGAA AATGGCCCCC CAAATTTTAA ATTCCCGTT TAAAAATTGG GGTGGGTAA 180
 ATTGGAAAAA CCCCCAAATT T 201

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 112 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1481:

CAGTATCAAG CATAGTAAAA AATGAGGGTA GGA CTGAAAA TACGGCGTTA TTGGTGGTGC 60
ATTACGGGTA AATATGTTGC ATGACCAGCA AGTTTGGnC TTCTGATGCA CC 112

(2) INFORMATION FOR SEQ ID NO: 1482:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 127 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1482:

CAAAAAACAA GTTCTGATAT GCAGTAGCTG AATAATTTTG CTAGTTACAC CAAGTGATC 60
TTCTGGTGT TTACTTTT TAATGTTTT CATATATTTT ATATGTATAA AAATGGGATT 120
TAGCGTA 127

(2) INFORMATION FOR SEQ ID NO: 1483:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 83 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1483:

AGTGGTGTAT TGGGTGAGTA ATGCTTAACT TCATACCTGG TGCATTGGCT GTTCAGTATC 60
ATTATATCTG CATGGGCGAT ACT 83

(2) INFORMATION FOR SEQ ID NO: 1484:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 201 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

TATTATTGAT GTTCTTTGGT TCATTCTTTG GTAATAATTT TGCACCTTGAA AATTTACAAC 60
 CGTTAGCTGG AACCTAGnCA AAGGGATGGG TTTAGTGGTC TATTGTGGGT TTATTGGTAT 120
 5 TCCGTGGGCC ACCCCATGGG GCCATTATGG TTTGGGAATT TTGGGAATAA ATTAATTTnC 180
 CCAACCAAAA ACCAGGCCAA G 201

(2) INFORMATION FOR SEQ ID NO: 1485:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 210 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1485:

20 CTCACAGCAA CATCAAAGAG GCAGATATTA GTCAAGTTCA ACGTAATAAC ATCTACCTTC 60
 ACAAGTCGAT AAAGGAGCAC CATCATTAAT AAGTAGATCA ACAAGTCAAC GAGAATTTTA 120
 ATGTGCAGAA TAGAGAAGTA CACCACACAn ATAATCAAGC GATGTAATTA CTACTACATT 180
 25 TTnCATTGACA GAGTGAACCT CAACAGCGGT 210

(2) INFORMATION FOR SEQ ID NO: 1486:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1486:

CAGGTTATGT TTGCATTAGA AGTTCTTGGA AAATCTTTAT GGAACGTGGT TTACACCCTG 60
 40 ACTTTGAATT GCATCGATCT GATGAAGATA AATGAAATTG AATGGGATGG CnACATGGA 120
 ATGCAACCTA TGACTTGGAT GGAATTAGAT GAAGCGGG 158

(2) INFORMATION FOR SEQ ID NO: 1487:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 114 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1487:

TTGCAGCATA TAGAGGTAGA GGCATCGCGA CAAAGTTATT AACGTCATTA CTTG

114

(2) INFORMATION FOR SEQ ID NO: 1488:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 108 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1488:

TGCTAAGTGA TAAAAAGAAT GATAAGCCAG GTGTACCAAT GGGTCCTGGA TTAGACCATT 60

TGGGAGATAT CGTTGTACCA CATGTTGATC AACTAACGTT nCCACATG 108

(2) INFORMATION FOR SEQ ID NO: 1489:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 112 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1489:

CAAnACGTAA TTTCATGATG AAAGTGGTCG ATAATTTCTT GAAACATCGC TTTCAGTAAT 60

AACGCCTGCT TTAAGGTCAC GTTCCGCATA GGTGTACTGA GGATGTTGAT GT 112

(2) INFORMATION FOR SEQ ID NO: 1490:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1490:

CAGAACGTTT AAAACAAAGT TGGAAAAGTT TTCTAATCGT ATTAGCTGCA TGTTTAATAC 60

TTATTATTGC AAGTGAAACG CTTATTTTCC TTTAGTCATT TGACCGATGT TAAAGAGGTG 120

AGATGGTTAT TTAGAATCAT TGTATTGATT GTTTTTGC GG TAGTGATGTT CACAATTTAT 180

ATCTCTTATC ATCATTATAT GAATGACTTT TTAGTTACTA AGTTATTTAA TATTTCCGCA 240

GCGACGCCAt AGTTATTATG TCTAT 265

(2) INFORMATION FOR SEQ ID NO: 1491:

(A) LENGTH: 113 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1491:

10 CnAAATTGGC CAGGGGCTCA TCCAATATTA AAATAGGCGT ACGAGGGATT AATAGACCAC 60
 CTAATGAAAC GCGTTGGTTG TTGGACCTCC AGATAAATCC TGGGGGTCGG TGG 113

(2) INFORMATION FOR SEQ ID NO: 1492:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 276 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1492:

25 ACTAAGAAAA TCCGAAATCT TTTCCGCTTC TTTTAAATAC GTAATACTTC CTTTTTTTCG 60
 CTCTAAATGT TTGGCATTCA ACTCATAACT ATTCATTAGT TTCGTTAAGC CTTCTGCATG 120
 ACTCTCATTT TGAGAAAAAA TTTCCAAATG GTACGAAGAT GTTTCAGGGT TATTCACTGA 180
 30 GCCACCTGCC AGAAAAGCTC CTCTCAAGTA ACTGCGTCTC ATTCGTCAT CTTGAATCAT 240
 TGAAATGATC AATTTTCATGG CGnnAAAATG CCGTCT 276

(2) INFORMATION FOR SEQ ID NO: 1493:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 110 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1493:

45 GATGACGAGC GCCAATTATG TCACTTTTAT GGCAAAAGCT GGAACATAAC AACnAGCCT 60
 GCCAGTAAAA TTGGCAATTG GGACGTTCTT AGCAGGTGCG TCATACATAC 110

(2) INFORMATION FOR SEQ ID NO: 1494:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 200 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1494:

5 AAAAAAAGG TTTTACCC GGAATCCAA AnTTTAAATC CCTTAAAAA AATTCCGGCC 60
 AACCCCCAAA CCAAGGTTT TTTCTTAAC CTTGGAAnTA ACCAAGGTTT TTTTCCAAA 120
 AAATTTTCCA AAAAAGGAAT TACCCAAACC CTAAAGGTT TAAAAATTGG GGGGGGAAAA 180
 10 AGGCCCTTTT AGGGGGGGAA 200

(2) INFORMATION FOR SEQ ID NO: 1495:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 253 base pairs
 15 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1495:

20 AAAAAATTG GTGCATTTAT CATATGGAGT ATTAATCTGT AGAAGTAAAG GCGATATAAA 60
 TGTTACTTTG GTAATAAAGA TTACAGCGAA CGTTATTATT GCTCAGGTCA GATCAAGAAA 120
 25 TTGGTGTCCG GGTGACAAGA CTTGGTGGCG CGGTGTAGTT TGTCAGTTGT GTGGTCATCT 180
 TAAATAACGC TATCGTACGG TGTGTATCAC ATGAAGGGAC TCTTACTAAT TCTGCAAGTA 240
 30 CACGTCACGC nnT 253

(2) INFORMATION FOR SEQ ID NO: 1496:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 104 base pairs
 35 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1496:

40 ACGCTAGCTT CTGAAAAAAT AAGTGAAC TA TGGATGCAAT GAnCCTATTC CTGAATGATA 60
 45 TTAGACGTAG CGCACCTGGT GCAGAACGCC AATAAAAAGA CAAG 104

(2) INFORMATION FOR SEQ ID NO: 1497:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 100 base pairs
 50 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

AGGGAGGCGC CCAAATGGCT CTATATTAAA AAAGGACTCT CAGAGCATTa ATGAAAAGTT 60
GAAGCTCAAA AGGAAnCGAA AGAAACAAGT ATCAAAACAT 100

(2) INFORMATION FOR SEQ ID NO: 1498:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 101 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1498:

TGGAACTTTG GGAAGTCAA ACGTTGTAA TCGTTGAACA TAAAGTTAAa CACATTCTGG 60
ATCATGTCTGA nCGCGTCCAT TTGATGGATA TAACGGGAAT A 101

(2) INFORMATION FOR SEQ ID NO: 1499:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 127 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1499:

AGTTCTGGTG CATCGTTTTT CATTGTATTT GTGACGATTa TCATTCCAGC ATTAGAATAT 60
TATGCATTAT ATTTAGGTGT GATAGGTGCA TTTATAGGTG GTTTAACTGT TTATACACTT 120
TCAGGTG 127

(2) INFORMATION FOR SEQ ID NO: 1500:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 560 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1500:

TCCCCGCTTT AATACCTTCC ACGATTCTT TAATTGCTTG CGGTTGGTCA CCTTGAGGCT 60
CAAAATCAGA ATGTATTTTA AAAGGATAAT GTTCAACCAT TGTACATAT GCCTCCTCTT 120
TCAACGTATT ATTTATATTT CCGCTCAACT CTTTGCTTTC TCATnACATA TnTTAGCAAA 180
GTAGTCACAC AAAAaGCAAA CGTTkGTTTC TAAAAATGTC GAACAAaGAA AnACAAACAT 240

AAATACACAT TATATTAATC ATCATTTTGT TTCAACAAAT TTGTTTGAAA CATTATTTTA 360
 AAGTTAATCT TAGCGATCTT CATCTTGATG TTTATGAAAT TCGAGTTGAT CTATAATTAA 420
 5 ATAACCAGCT AATAATGACA CTACATCAAT AAAAATAATC CACTCGTTAT GGAAATACTC 480
 TTTATAGATT GAGGCACCAA TTAAAATTAA TGTGAGAATA GTACCGACCC ATTTACTTCT 540
 10 TGTATTACA CTAAATAATA 560

(2) INFORMATION FOR SEQ ID NO: 1501:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 102 base pairs
 15 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1501:

ATTAAATCAT ACTnACAATT ACCGATGACA TTATTCCAAT TCAATCTAAT TCCGTGATGA 60
 AAGAGCCACG TTTTGTTTAC TTCGTGGGCG TGAATTATTA TG 102
 25

(2) INFORMATION FOR SEQ ID NO: 1502:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 30 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1502:

TATGGTAGCT CCAAATGGTT GTATCGTCAC ACCATCATCT TCAAGTGCAA TGCGATGTAA 60
 TCGATTGGCT GTTGTTTCTG TTACCCATAG TACTTTTTCA TCTGTACTTA AAGCAATACC 120
 40 ATTTGCTACG CTAATATTTT GAATGATAGG CGTCACTGTT CTAAAGTCCG GCGAAACATA 180
 ATAAACGCCT CCTAGTGGAT TGGTAGAGTA TCCTCTAAAA TCTGTAAAAT AAAATCCACC 240
 45 TTTAGAATCA AATACCATGT CATCAATACA ATATGCTGTT GAAAGATCTT CAATAATATC 300
 TTGTAAGTTG TCACCATTTT CTGTAGCTGC AAAAATGCCT CCGGAGATT TAAAATCTCC 360
 nAAAATAACC AACGnATAAA TCGGGCAnCT TATGGAATTG 400

(2) INFORMATION FOR SEQ ID NO: 1503:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 168 base pairs
 55 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1503:

5 TACAGGTAGT TAACAGTTGA TGTTAAATGG CGTACTGGAT TCTTTACGCA CGATTTTTTG 60
 TTAATAAGTA TGGGATAGCA CATTACTATA TCCTACTTAC GACTTATTGG ATATGTCnTA 120
 GCTATTCTTA AGCTCGAAAA GTTTCACAGG ATACATAAGG GACCAACT 168

(2) INFORMATION FOR SEQ ID NO: 1504:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 237 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1504:

20 CTACTGATTG TGTAATGTCG TTGGTAGGCT TGGGCTGTAC GCAGTATTAG GTGTAGGCAA 60
 CTTGGCTTTT GGCATCTACC TTGTATGTGT CGTGTATCTA nGGCTGGGGC TTGCTCCTTC 120
 25 AGTTGTTAGA CAGTAGGGGG TAATCTCAGG GGTGCAATGT ACTCCCTCCG TCCTAAAATA 180
 CnTATATGC TCGTGCCGAA TTCCTGCAGC CCGGGGGATC CACTAGTTCT AGAGCGG 237

(2) INFORMATION FOR SEQ ID NO: 1505:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 209 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1505:

40 CGCATTTACC ACCATATGAT GGATCCAnCG ACGTTTTAAT AAAGATAAAA GTGACAGTAG 60
 CGGGAAAACA GGCnCATAAAT TCACATCTCT TTTGAAAAAT ATGTTCAAGC TAGGATCATT 120
 AGGAGAGTCA TATTAATAAT AAAAATGTTG CAATCAATCG ACGTGCGTTG AATCTTAAAT 180
 45 ACATAATAAA TGTGTAGAA GATATGGGT 209

(2) INFORMATION FOR SEQ ID NO: 1506:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 121 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1506:

5 AAAATGTGGC TATTGATTTT GACTTGAAC TTTTGAACA TTTCTCTCAA GGATTTAAAT 60
 GTAGTAACA GGGCAGGTAC TACGGTACTT nCCTATTTT TTATGCAAAT TTTAAAAAAC 120
 A 121

(2) INFORMATION FOR SEQ ID NO: 1507:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1507:

20 AATGACAAGG TCAGCATTAA AACCATTAA AAATAAACGC GTTATGGTTA CTGGACGTAT 60
 ACAACGTGTT TTGTTTAAAA ATTATTTAGA TAGACATAGC ACATTAAAGC CGAATGTAAG 120
 GATATTATTA AAAGAnGTAT TTGT 144

(2) INFORMATION FOR SEQ ID NO: 1508:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 139 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1508:

35 CCGATTGAAT CTGTGTACAC TTCACCAAAG ATATCTTCT TCGTTTCTTC AGATAAACTT 60
 TCCATTGCTT TCTTATCAAC ACTTGTTTCT ACTAATAAGT GTGTTAATTT GTGCTTnTTA 120
 40 ACAAACTCAA TAGCTTGTC 139

(2) INFORMATION FOR SEQ ID NO: 1509:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 155 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1509:

55 TCTGCCTGCC TCGGCCTCCC AAAGTGCTGG CATTACAGGC ATGAGCCACC ATGCCTGGCT 60

CAAGTTAAAA TACAGATGTA AGACTTGACT TGATC

155

(2) INFORMATION FOR SEQ ID NO: 1510:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 87 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1510:

ATCCCAATGC TAATGAATTT GCATATACGA TAAATAATGC TTTTATCAT CAATAAAGCT 60

ATGAATCTTT CAAGATCTTC ATTGAAC 87

(2) INFORMATION FOR SEQ ID NO: 1511:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 217 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1511:

ATAGGCGTTT ACCAGTTATT TTCGAATCCA TATAATTATG TTTGTCCGTT TGGTTTAATC 60

CAATTAATTG ATTAAGTTTT TCCAATTCCT TTTTTTTTAA TTAAAATTCC AATCCTTAAA 120

AAAAATTGGA AAAAAGCCTT AAAAAAATT GGTTAATTTT CCCAAGGGAA TTAAAAATTT 180

TGGGGTTTTT TnAGGnCCCT TTTGGGAAAA ACCCAAC 217

(2) INFORMATION FOR SEQ ID NO: 1512:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 101 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1512:

TGACATTGCA TCGGATTATG TTACATCANG GACAACGGGC CTCAAAAGC GGTGCACAAA 60

CGTTCGGTAA TCATATGCCA GTGCAATCGG ATGTAAAGAG A 101

(2) INFORMATION FOR SEQ ID NO: 1513:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 114 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1513:

GATTTTATTG AAATGATTTT ACCTGTGATC AATTATTGTA ACAAATCTAC AATAAAATTG 60

10 TCTTACTGCA TGACCTAATA AnATAGCAAC AGATATCATA CACACTTGTA ATTT 114

(2) INFORMATION FOR SEQ ID NO: 1514:

(i) SEQUENCE CHARACTERISTICS:

15 (A) LENGTH: 77 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1514:

ACATATACAG GTACGTGTTT AGTCCGTCGT ATACTGCAAA ATTATGTCCG ATGAAATTAG 60

25 GGGAAAATTG TAGAACG 77

(2) INFORMATION FOR SEQ ID NO: 1515:

(i) SEQUENCE CHARACTERISTICS:

30 (A) LENGTH: 102 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1515:

CCTTATAAAG TTAATGCAAG CAACATGGAC AAATTATTAn TTGAATAAAC TGCAAGAAAG 60

40 ACAACAATCA TTCTTCGGAA TGCTAGGAGA ATATATTTTA GA 102

(2) INFORMATION FOR SEQ ID NO: 1516:

(i) SEQUENCE CHARACTERISTICS:

45 (A) LENGTH: 89 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1516:

CAATTTTAAA TAGGATTTTT AAGACCTTGG TTGGGTTTTG GTACAATTAA TGGGGACATG 60

55 ACTAGGTCTT GCCACGTTTA TATGCATCT 89

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 102 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1517:

GTAAGAGTGC ATAGTTTTTA AATGTTGCTT GTCTGGTnTC ATTTTGGCAC CATACAGTTC 60
 GTACCTGGAT TAGGGAAATG CCAAATGTCC GCGTAGTGAT AT 102

(2) INFORMATION FOR SEQ ID NO: 1518:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 448 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1518:

GAGAACTCCT TACCACAATC AAAAGTAATT GATTTAATA TATGAGAAGA TAAAATGAAA 60
 AGGTGCAAGC AGTATTAAGA ATTTAGGTAG CAAGAAAACA AGAAGTGGTA CATACGATGC 120
 TAACCTAAAA AGAATTGGAG ATTAAAATGA TTATTAACCT TGAAACACAA CAAATACATT 180
 TTGATTTAGA ACATGAAATT CCCTATTTTC AAGCACCTGA GAAAAATAGG ATACGCTTAG 240
 ATATTGATGT TCTCAATAAA AAGCnAATTT CTAATATTAT TAATGTTATA TTTAATAACC 300
 AATCAAAGAC GAAATGTACA TTTTGTCTG AATACTTATA TCCTGTTAAA TTTAGAGAAA 360
 AAACAAGAAT TGGTCGTTTT TTAAATATTA CTAAGTGGTA CGAAGAAATC CATTCTACCG 420
 ATGAGAAGTA TGnATTGCA ACTATTAA 448

(2) INFORMATION FOR SEQ ID NO: 1519:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 304 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1519:

ATGGACGAAA GAAGATGTCA TTGCTTTTGA AAACCTAACA AATATTAAAG TAAATTTAAA 60
 AGGTAGCGGT TTTGTGTCCC ACCAATCAAT TAGTAAGGGA CAAAACTTA CTGAAAAAGA 120

ATTCAAATTC AGATGGTnAA GAAGAAATCT GACAGTTAAA ACTGACAGGG ATAAGTCGGG 240
 ACTnAACAGG AATGGGCTAC nTTTAAATTT AGGGATGGTA TTGGGCCACT ATTTGGTTTT 300
 5 TGAC 304

(2) INFORMATION FOR SEQ ID NO: 1520:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 322 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1520:

ATGACGTCGC ATGCACGCGT AcGTAAGCTT GGaTCCTCTA GAGCGGCCGC CCTTTTTTTTTT 60
 20 TTTTTTTTTT TTTCTGTTGG CCTTTGATAA TTTTATTGGA TCAGTAACAA CTTTTTGTGT 120
 TTCAACTAAG ATAGCTAAAA TTCTAACACT TATATGTAAA AATTACACTC CATTTTAGCA 180
 CAAATGTtAA CAGAAATTAA CAGCACAGTG CCATGAAGAA ATGAnAAATA CACAGCTTTG 240
 25 GTAGGGnAAT GGTCTCGGAA ATAATGTAAT GCCAAGTnTC TGATCATTTA ACATATCACT 300
 CACCTCCTTC TTCATCTGAT GT 322

(2) INFORMATION FOR SEQ ID NO: 1521:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 105 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1521:

TAAATACAAA CCCTTTAAAC ATATTTACTA AGTCGTTCAA TTGTTGATTT GATAAnTGAT 60
 40 GTGATGTGGT ATTTTGCATC GGTCCTGCTT GATTCCAGAC ATGTC 105

(2) INFORMATION FOR SEQ ID NO: 1522:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 118 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1522:

GATCGTATTT CCCAGATGTA AATTCTGTGG ACAATTGGCG TCAAATAGCT TCTAGTGG 118

(2) INFORMATION FOR SEQ ID NO: 1523:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 157 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1523:

CnGCATATAA TCCCGCGACA TGTCTTTTAC GGGTGCACTT GTAATATTAT TACCCCCCGT 60
 ATAACCCATG TATATCTATA CTTTACCACA TAAAATAATT CCGGGACTAT TTGGCACATG 120
 TTTTGGGTGA ATTTCTTTAG TGGCACACCA CCCCTGG 157

(2) INFORMATION FOR SEQ ID NO: 1524:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 82 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1524:

ACTGAGGTAG GTTATGTAGG ACGAGATGTT GAAAGTATGG TTAGACATCT TGTGTATCCT 60
 TGAGTAAGAT TAGTCAAGGC CG 82

(2) INFORMATION FOR SEQ ID NO: 1525:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1525:

GATACAAAAA AGAAGTTCAA TTTGAACTAT GAAGAAATTT ATATTTTAAA TCATATTTTA 60
 AGAAGTGAGT CTAACGnAAT CTCATCTAAA GAGATTGCTA AGTGCTCAGA GTTCAAACCT 120
 TACTATTTAA CTAAAGCTTT ACAAAGCTA AAAGATTTAA AATTGTTATC AAAGAAAAGA 180
 AGTTTACAAG ACGAAAGAAC AGTTATTGTT TATGTTACAG ATACACAAA AGCAAATATT 240
 CAAAAACTGA TTTCAGAATT AGAAGAATAC ATTAATAATT AAATCAAGGT TAATTGCGTT 300

AAAATTAAC TAAATTTAA ATATTGAAGA GCTTAATTAA

400

(2) INFORMATION FOR SEQ ID NO: 1526:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 125 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1526:

ACTGTCTAAT ATTCAC TCCC TTAAAGTGT TTTTCATATTT TTCTATTAAT GTTCATATTG 60
 TAGGGTGTG AATGCATCTA AGCATThCAA GTTATTCTCC AAGTTCATCA ATTTCAAAAT 120
 GGAAC 125

(2) INFORMATION FOR SEQ ID NO: 1527:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 112 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1527:

CATGTTTATT TATGTTTCGG CTTTAATGTT GAAGAGTTTT ACAAAGTTTA CCGATTGCAT 60
 TTTATAATTT TAATGCATTA TTGGAGCATT GGCTATCATC TATTACTGCG nA 112

(2) INFORMATION FOR SEQ ID NO: 1528:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 115 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1528:

GCGAAGATGA GGATGAGATG ACTAAAGGAA AATATTGAAA AACAACCRAA AAAGTATGA 60
 ACATTATTAA AAATTTACAA AATCAAATCG ACAACTTGAG CGCAAGAACH AACAG 115

(2) INFORMATION FOR SEQ ID NO: 1529:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1529:

5 ATGGATCTTC CGCTTCTCTT AATTGATCAA TTAAATCAGA CATTTCATGT TTTTGTAAT 60
 AATGATTCGC TTTAATGGAT TTTTACATG ACATCATGAT TGCTACATCT TCACGTAATT 120
 10 TTTTGATATC TACTTTTTTC TCTTCCAAAA TTAGCTCAAT CATATCTTTA ATAATTTCTT 180
 CTACTTCATC TTTAGGGAAC CAAACTGGAT AGCTACTTAC AATATAATCA TGACCACCAA 240
 AATGTTCTAA CATGATACCT ACTTGTTGAA GCTCATTTTT ATATTGATCA ATGACTAATT 300
 15 GTTCATCTTT TGAAAAATGA AATGTTAACG GGATTAATAA ATCTTGTAAT TCATTGGTAA 360
 CCTCACCTAT TtAtCTCGA AAATATTCAT AtnTTAtnCT 400

(2) INFORMATION FOR SEQ ID NO: 1530:

20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 97 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1530:

25 TAACAGTCAA CCCACCCATT AATATATATT CAACGGCTGA CTGATACGAC GAACGTCAA 60
 30 GAATATGAGA GGAATAGGGA CAAGATCATC ACACATA 97

(2) INFORMATION FOR SEQ ID NO: 1531:

35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 150 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1531:

40 TCATAACGGT GCAACTTAGA GCTGACGTAT AGTTCATTCC AACTATATAC GATGTATCAA 60
 45 CACCATGTTT CAGTTTTAGG TTAACGATAC TGTATACCGT ATTATGTCAG nGGCACCTTA 120
 TCTTCACGTA CTTTACGGCG AGATGATGAC 150

(2) INFORMATION FOR SEQ ID NO: 1532:

50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 138 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1532:

5 ATTCATTCTG CTAACCAAGTA AGGCAACCCC GCCAGCCTAG CCGGGTCCTC AACGACAGGA 60
 GCACGATCAT GCGCACCCGT GGCCAGGACC CAACGCTGCC CGCCTATCC TGAAGCCAAA 120
 GGAAATGAGA TCGGAATT 138

(2) INFORMATION FOR SEQ ID NO: 1533:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 460 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1533:

20 GGGGnCCnGG CAATGGAGGC GTGCTTGGAT GGTGCTTGGA ATCATCCCTT TGGCCTCGAT 60
 CATAAGCTTA AACTTTTGGT GCTGGnGCCA CTGGAGGGAA ATCTTCAATT CTGGCAAATG 120
 GTAATTnCCT ATACCAACAT TTAAGGCATG TGGTAATGCT GGCTACTCCC GCTTCGTTAT 180
 CAGCTACATG ACAAATACAG ATGCCATCAC CTTTGCGTCC ATTTTAATCG TTGATGCTTG 240
 GAAATGTTTT TTGTAAATAT CAATGTTATC CTTGCTGTA TGTATCGCAT TTATATCTGG 300
 TAGCAAAAAT GTTCCAACAG AAAGCCCTAT ACCTAGTTCG GCAGCTATTT TGGCAGATGT 360
 TGCGCTACTA CTTAATAACC ACATTTCTGG AAAATGATCA TGTGTGGTGC ACTACGATCG 420
 ACTTGTTTAT CTTTATTGTT AGATAATACG GAATACGnAA 460

(2) INFORMATION FOR SEQ ID NO: 1534:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 145 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1534:

45 TACGCTAATA AATAGTTCAC TTTTCCATTT TGTGTAGTCA GTCATTGTA TTCTTCAATT 60
 TGCTCTTCAT TTAATGCCGC ATAAGCTTGA TCAATAATAT TTGGATTAAAG TTGTCCAATA 120
 TACTCTAACT GGTCAAGATA AACAn 145

(2) INFORMATION FOR SEQ ID NO: 1535:

(A) LENGTH: 151 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1535:

10 ACGCGATTTA ATCGTTCGTT CCAACGATGT CCACTCCCCT ACTAATAATT AAAATCATT 60
 CAAATTATTT CAACTTTAC AATTnAACT AACAGTTTTC TCAATAAAAT GCAAGCTTTT 120
 CTCATTTGTT ATTTAGAATG ATTATGATTT A 151

15

(2) INFORMATION FOR SEQ ID NO: 1536:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 86 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1536:

25

ATAATAGAAT CATTACAAAT TATTTAGAC TTTACAATTA AGACTAACAG TTTTCTCAAT 60
 AAAATGCAAG CTTTCTCAT TGTAA 86

30

(2) INFORMATION FOR SEQ ID NO: 1537:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1537:

40

ACCAAAGTGT AAAGCCATAT ACTGAACATA TTGATAGCAT ACTCAATGAG ATCAAATTAC 60
 ATCGTGAATT TATTATAGAA GTACCTTATA TGAATTCAAG GAAATTTGAG CTACTGATTG 120
 CTAACATTGA ACAACTTTCT GTCGAATGTC ATTTTAAGCG AACAAAGTCGA AAGTTATTTA 180
 TAGAAAAGCT TAAAAGTGTT CAATATGATT TACAAAATAT ATTAGATGGC GTAACACnAG 240
 AGGGTACTGA TGGTTAAAAC AGTTTATGTA ACAGGTTACA AATCATTCTGA ATTAAACATT 300
 50 TTTaAAGATG ACGCACCTGA AGTACATTAT TTAACAAT TTATAAACA TAAAATTGAA 360
 CAACTGTnGG ATGAAGGATT AGAATGGGnG TTAATACAAG 400

50

(2) INFORMATION FOR SEQ ID NO: 1538:

55

- (A) LENGTH: 136 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1538:

10 ATATCGTTAC TGCTGTATGT TTCAATATCT ATATTCATAA ATTTCAAATh CTGACACCTC 60
 AATTTCTTTA AAATAAGGGG CAGAACCCAC TATGACTATA GGATCTCTCA CAGGTCAATT 120
 CGCAAATCAC TCGTGC 136

15 (2) INFORMATION FOR SEQ ID NO: 1539:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 85 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

20

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1539:

TAAATATCTC GGCACAATGA TGCGGGATAT TTTTITACAA TAGGCATAAA GGCTGGAAAA 60
 AACATATCTA GTGCTATGAT ACTTA 85

30 (2) INFORMATION FOR SEQ ID NO: 1540:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 73 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

35

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1540:

ACAATTTGTT TATTTCAACA AATTATCTTT ATTCCACGAT GTGCACAAGT GGTGAAATC 60
 AGCTGAAGAC ACG 73

45 (2) INFORMATION FOR SEQ ID NO: 1541:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 106 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

50

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1541:

55

TGCAGGAATT CGATATCAAG CTTATCGATA CCGTCGACCT CGAGGn

106

(2) INFORMATION FOR SEQ ID NO: 1542:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 87 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1542:

ACATCAACTC ACCATAATA TATATTCACG GCTGACTGAT ACGACGAACG TCAAAGAATA 60
 TGAGAGGAAT AGGGACAAGA TCATCAC 87

(2) INFORMATION FOR SEQ ID NO: 1543:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1543:

GCTTATTCTG AAAAATATTT AAATTGAAGA AAAGAATATT CTAACACGG AAGTGGTATT 60
 AACTAATAAC TAGTATCCTT TATAAATAAA CATAAAAATA TTCAAACGAA GGTCTACTAA 120
 ATAACTATCC ATAAAGTGAG TATAAGTTTG TTTGTAAAAC TGAAGTAAAA AGCATAAGGA 180
 ATTACACTTT AAATACATAT AGTACTTACG AATAGAAAAT AATCCCTTCA ACAGTAATTT 240
 TTAAACAAAA ATAAGTGTTG TTTTATGTTG ACTCTACTAG AATAACTTGA TATTATATAA 300
 AAGTCGTCAA ACGGCACTAA TATTTAnnAA ACAAATGTTT TAAGTTGTTG GATTThAAAA 360
 TATTGAATTA AAGTGTAAT TTGGACTATT GGAAATTGCG 400

(2) INFORMATION FOR SEQ ID NO: 1544:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 103 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1544:

ATAACGCTAA TCAGCCACAT TCAGTATTGT TAAATGGACA CACAAGCAGT TGATGAAAAT 60

(2) INFORMATION FOR SEQ ID NO: 1545:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 108 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1545:

GGCTGTTATT GTTGTGGAGT TAAAAATGAA GGAAAATTAT AAACATGGTA AGCGTGTTC 60
 TCGTATTACT TTA CTTAAAC nAACGGTATA ACCATACCTA ACTTAGTA 108

(2) INFORMATION FOR SEQ ID NO: 1546:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 554 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1546:

AAnTATGTTT CATATATTAT GAATCTAGCC TTAATCATAT TGCATTCAAA ATAATTTTAA 60
 AAAATGAAAA GAAAGGATTT AGCATGCAAA AATTCAAAGA CTTTTTTTAC GATGATTTAT 120
 CGGTACACG AGGAAATTAT TTTTAACTT TAATGGCAGC ATTTTTTATT ACTATCATTT 180
 TATTTATCGG CATAGTTGTC AGTGAAGTAC ATTTACTTTA TAGCATGCTA ATTGTATTAG 240
 TAGGTTTAAT TCTATTGAGG CTATTCAAAA TCAATTTATT CTCTTTTAAA AAATTAACAT 300
 TGTCTCAAGT TATTTATATT ATAGGCGGTG CACTATTAAT TTATGGGTTA GATAATCTTT 360
 ATTTATATTT TCATGACGTA CCGGCAATGA ACAACAATTA GAGCAAGCAA TACGGAAATA 420
 CACCATTCTA TATTTCTATT TtCACTGTaC CATCATCCCC GCTATTGTGG aAGAAaTTGT 480
 TTTtCGCGGT ATGATAATAA GGGkTATCTT CAGAAAACAC TTGTTTTTTAG GGTTAATTGT 540
 GTCTAGTTTA GTTT 554

(2) INFORMATION FOR SEQ ID NO: 1547:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

TAAAGCAACA CTTTAAATCC CTTTGAACCT TAGTTTATCC GCTAAATCAT AAGCTTCTTT 60
 TTTGCTACTT ACAAAAATCA ATCCTTGTA AATTTCACCT GAATATCCAT AGTAATCTGT 120
 5 CTTTGAATA ATATAATTAA CTCTTTCATC AGAAGTTAAA TATCTCAGTT TAGTTACATC 180
 ATCTTCTTTA ATACCTTGAT GTACATAATC AGTCACACCA AAATAATGAA ATGGGACATA 240
 10 AAATATCACT TTCTAATGCT GCTTGTAACC TTATTTCATA TGCAATATTA TAATCAAACA 300
 GTTCAAATAT ACTTAATTCA TCTGGATCTT TCTGGTGGTA GGCAGGTCAT TCCCAGCANG 360
 AACTTAGGGT TTGGAGGTAG GTTAAAATAC TCGTTGGAT 400

(2) INFORMATION FOR SEQ ID NO: 1548:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 73 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1548:

CGCTCTAGAA CTAGTGGATC CCCCGGGCTG CAGGAATTCG GCACAGCATA TCTAGTATTT 60
 TAGGACGGAG GGA 73

(2) INFORMATION FOR SEQ ID NO: 1549:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 73 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1549:

GTATCCAAGC AGCTTTTAAA CAATATGGCA TAAACATTAT TAACGGCTAT GGTTTAACTG 60
 ATGGCACCTC TTG 73

(2) INFORMATION FOR SEQ ID NO: 1550:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 120 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1550:

GTAACATGTA TAGTGAAGTG ACTACTAAGA AGnCGTATTG TGATATTGAT AGCAGCTGAT 120

(2) INFORMATION FOR SEQ ID NO: 1551:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 192 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1551:

GGTATGTATT AATTAAAATG TGGTCATGAT TGAAACAGCA ATGTAAAAAT AGCACAACAT 60
 AATTnATAAA GGAGAGAAAC GGCATGCATG AACAAGATTT TAGAATTTTA GAGGGTCAAG 120
 ATATTACTTT GCCAGAATTA GGTAGAGAAT TAGAnAATAT TACAGGACAT ACGATTGCTG 180
 ATTCTACTGG CG 192

(2) INFORMATION FOR SEQ ID NO: 1552:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 76 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1552:

CTAAGTTAGA TGCTAGTATA CAAGATTTAC AACAAAAGGT ACTGGAATCG AATTGTGAAC 60
 TAGACAAACT AAATCT 76

(2) INFORMATION FOR SEQ ID NO: 1553:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 135 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1553:

TGTGTTGGGG CCCCGTATAT TGAAAATTTG TTATAGGTGT ATTTCTTTGG TTAATATTG 60
 TTATATAACT TGTAGTTTTA GGATGTTGAT TTTGCTTACC TTGTCTGCTA TGTAATGTCA 120
 CATCAACATG ATtnA 135

(2) INFORMATION FOR SEQ ID NO: 1554:

- (A) LENGTH: 104 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1554:

10

TTTGAaATCA AATTCAC TTC GCAAACGTGT CCAAGCGTGA GCAAAGGGCT AGATGATTAA 60

TAGTTGCCCC ACTAACGGGA TCGCCCCAGT TATCCAAC TT ATCT 104

(2) INFORMATION FOR SEQ ID NO: 1555:

15

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 100 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1555:

25

AATAAGAAAC AngACACTAG CTCACCACGA CGCGCACGGC CTGCGTGTA AATGTTGGT 60

GGCGCGGGTT GGAGATCGTG TTCAACCAGA GCAGAAAATA 100

(2) INFORMATION FOR SEQ ID NO: 1556:

30

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 86 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1556:

40

CAATGAAATT ATTTATTATT TTAAGTGCAT TAAACCCCGA TGATGGCTGT CCGGTACCAG 60

GTGCATTTTG GTGCCCATGG TTTACC 86

(2) INFORMATION FOR SEQ ID NO: 1557:

45

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 78 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1557:

55

GTCATGTTCC CATCAAACT AATTTGTACT TACTAAAGGC TCAGCAGCGC AACAAATTAGG 60

(2) INFORMATION FOR SEQ ID NO: 1558:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 82 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1558:

AACTGGTTAC AGAAATACCA CGTTCTTGTT TCAACTTTCA TCCAGTCACT TGATCGCAAA 60
TTTACCAGTC TTCTTCCCTT TA 82

(2) INFORMATION FOR SEQ ID NO: 1559:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 78 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1559:

CCACAGCGGC ACTATAGCCA GCCCCTAATA TATACAGTAT TTGCATCTGA CTCATTGGTT 60
CATAAGTATA TGCACTGA 78

(2) INFORMATION FOR SEQ ID NO: 1560:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 76 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1560:

ACCATTGCT AACTTTTTAG CAGCGCAATG TTCTTATTAA CTGCTTACGC CATCTATAAA 60
AATAAACGTT CAACAA 76

(2) INFORMATION FOR SEQ ID NO: 1561:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 200 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

TTGGAACCCA AATTTTTTTA ATTTTCCCAA AAATTGGGGG GGGACCCCCA ATTCCCTTAA 60
 GGGTTTTCTT TGGGGGCCGG GGGTTAATTC CACCCGGGGT TAAAATTTTC CCAAAAATTA 120
 5 ATTTTnGAAA AGTTTAAATT TAAGGAAACC CATtnGTCCG GAATTTTAC CCCATCCTTA 180
 TGGGGGGTCC CAAAGATTCC 200

(2) INFORMATION FOR SEQ ID NO: 1562:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1562:

20 AACACAGAGA ATAACCAAGA GAAGACGTTT TCATCTGAAG AAAGTAACAG TAmGCCATTT 60
 ATGGAAGAAA ATCAAAACGA TGAGATAGTT ATAAAAGAAG ATTCATATAA TCCATTCGTA 120
 ACGAAAACAT CTGAAAGTTT AATAGCTGAT GATGAATCTT CTGGTTATAA TAATACACGT 180
 25 GAAAAAGATG AAGACTACTT CAAAAAACAA CAAGAAATTT TACAAGAAAT GGATCAAACA 240
 TTTGATTCAA ATGATGGTAC AACTGTGCAA AATTATGAGA ATAAAGCGTC TGATGATTAT 300
 TATGATGTAA ACGATATTAA AGGAACAAAA AGTAAAGACC CTAAACGAGG AATTCCATAT 360
 30 ATGGAATTGT TGGnCACTCA TGAACGTTA TTATTGCTCA 400

(2) INFORMATION FOR SEQ ID NO: 1563:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 454 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1563:

TCITCATCAT CTTCTAATTT ACCAGCTGGA ATTTCTAGCA ATGGTTTTTC TACTGGTTTA 60
 45 CGATACTGTT TACTAATAC GACTTCTTTT TTAGGTGTCA CTGCACAAAC ArCAACTGCA 120
 CCATTATGAT AACTAATTC TCTTGTGAC GTTTCACCGT TTGGTAATGT CACTGTATGA 180
 ATTTCTACAT CTACAATTTT GCCATTATAA ATAACTGTTT GATCAATTGT TTTTTCATTT 240
 50 AAATCCATTA TAATCACGTT CCTTTAAATT CATATTATAT ATTGATACAC TATGCTTGTT 300
 AGCTAAAGTG TATCGAAAGG AGAACAGACA TGCAAAAAAA TATATTAAAA AGTGGTATTT 360

AAATTATAGG ATTGTGCTGT TGAAAATGGG TATC

454

(2) INFORMATION FOR SEQ ID NO: 1564:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 69 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1564:

ACATCTCGCA TCGTCAGCAG TGTCTTGAAC CACTAGCAGG TCAAACAAAG CTGTACAGGC 60

AACATCTGC 69

(2) INFORMATION FOR SEQ ID NO: 1565:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 117 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1565:

TCCAGAACCA TTTTAAATCC CGGGAAATAT AATTACCTCC ACTAAGTAA TATATCCAAG 60

CCAAGACTAA TCCTCCTTAA GCCGGTTTAA GTAACCAGGT TGAGAAGGAT TTTTGG 117

(2) INFORMATION FOR SEQ ID NO: 1566:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 103 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1566:

TATTGAGATT AACAGTCTGG GAAAAATGAA CAGCAATTGT nTAATGTGAC GATGCTGATT 60

ACTTTTAAAC AGTATCATTT AATAACTCAG AGATGCGCTT TAT 103

(2) INFORMATION FOR SEQ ID NO: 1567:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 81 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1567:

5 AATGGATGGG ACAGCAATTA GTGCATAACG ACAATATATG CTCATTTTGT CGGCAACTGG 60
TTAAGAATCG TATTGTCACA A 81

(2) INFORMATION FOR SEQ ID NO: 1568:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 80 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1568:

20 AATGGATTCA GTAGGTATTG GTGAAGCGCC AGACGCAGCT GATTTGAAAG ATGAAGGTTC 60
ACATACTTTT AGCATACCTT 80

(2) INFORMATION FOR SEQ ID NO: 1569:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 95 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1569:

30 TTTTAAATA CGATTTTAAG GAGGCCATTA TAATGGCGAG TAAAAGTAGC GAATTAATGG 60
35 TTTTGGTTAG GAATTGGTCG TTTAGGCATT CAGGA 95

(2) INFORMATION FOR SEQ ID NO: 1570:

(i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 118 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1570:

45 CCCAATAAAA AAAGCCTGTT GTCACAATGG TCATAGACAC GTACATACTT TAAAGGTTTC 60
50 TGTAATATAA ATATTTTATA TGCCACTTTA AAGTTGGnAC GTTCGTATGT TGTAATAA 118

(2) INFORMATION FOR SEQ ID NO: 1571:

(i) SEQUENCE CHARACTERISTICS:

- 55 (A) LENGTH: 104 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1571:

GACTTGATCA ATGAAGCATT GTGTGACAAT TGGTCTGTTT GCACACCGCA CGGATTGnGC 60

10

GTCATTTATT TGTACTAATT CAAAAACAT TGTGTGTTTC CTAG 104

(2) INFORMATION FOR SEQ ID NO: 1572:

(i) SEQUENCE CHARACTERISTICS:

15

(A) LENGTH: 118 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1572:

CCGAAGTGA ATGGTCCTAA TGTTTTACTC ATACCATATT GCGTAACCAT TGAGCGGCGA 60

25

TGTGTTGCA CGTCGAGCAT TGAGACCGTT GTACTCGTAA nGTATATCTC TGTACACG 118

(2) INFORMATION FOR SEQ ID NO: 1573:

(i) SEQUENCE CHARACTERISTICS:

30

(A) LENGTH: 74 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1573:

AGGGATCAAA GGTCCATCCC CCATGCATTG GATAGTGGGG GATGACTTTT GATCCTATGT 60

TCCAGTTGCT TATT 74

40

(2) INFORMATION FOR SEQ ID NO: 1574:

(i) SEQUENCE CHARACTERISTICS:

45

(A) LENGTH: 341 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1574:

AACCTTTTGA GTAAATTCAC CAATACTCAT CCCCTTATCA TTAAACAAAC TTTTATTAAT 60

GTTTTTGGTT ATATTATGAG TCTTTACTGC TTTTAGATTG TAAAAATTAT CGTCATAAAT 120

55

GTAATTAATG TAATAATAGA AAAGTGTATA TATCTCATAT CGCCACCTGC TATACAACTT 240
 ATTAAATAAT TAATTCCAAG ACATATTAAT TATCTAATTA TAACCTTAGT TnACGTTATT 300
 5 ACATAATATA AAAATATATA ATAACCTTATC CnCCGGCnCC T 341

(2) INFORMATION FOR SEQ ID NO: 1575:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 109 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1575:

ACGTGTACCA ACTTTTGGGC ACCATTGATA ATANGTGTCA TAGGGTGACT CAGCATAACG 60
 20 GGCAAGCCTA TTAATGATAG CCAGATTAAG ACATACAGTA CATATGTTC 109

(2) INFORMATION FOR SEQ ID NO: 1576:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 79 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1576:

GCTAGATTGC GGGGAATTAAC AATCATCAGC GATTTAATAT TTGCACTGGA GACGTCATGG 60
 35 TAATAAAAAA TTGATGAGA 79

(2) INFORMATION FOR SEQ ID NO: 1577:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 69 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1577:

ATGATGGCTA TCATGAGATT GAGATGATAA TGACAACAGT TGATTTGAAA TGATCGTGTA 60
 ACTTTTCAT 69

(2) INFORMATION FOR SEQ ID NO: 1578:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 104 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1578:

AAATTGTCAC TnCAGGTCAT AACCAACCAG GTGGGACTGC ACGAGCGTTA CTAATGATCC 60

10 AACGGTCTTG CTTTGTGATG AGGCAACAAG TGCACCTTGAT CCGC 104

(2) INFORMATION FOR SEQ ID NO: 1579:

(i) SEQUENCE CHARACTERISTICS:

15

(A) LENGTH: 89 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1579:

GCTCAATAGA TACAAC TATT AGGACAACGG ACTATCGTTT ACAATTTATT CCAGATAAGG 60

25 ATCGCGCAGG TCGTATGCGT AACTATGCA 89

(2) INFORMATION FOR SEQ ID NO: 1580:

(i) SEQUENCE CHARACTERISTICS:

30

(A) LENGTH: 102 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1580:

TTGTCTCTAA TAATGGnTTT GGCTTTTTTCT AAAATTTT CAG ATGTGGGTGC TGGTGAAGCA 60

40 CCGACTGGTT AATTTTCTTG TCGTCACGGC CACTTTTTGT TT 102

(2) INFORMATION FOR SEQ ID NO: 1581:

(i) SEQUENCE CHARACTERISTICS:

45

(A) LENGTH: 102 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1581:

AAGGTGCTGT TATTAGGATA ATGnATT TAA ACCCCATGGT ATGAAGGATA TCTGGAAGTT 60

55 AGATTGGATA TCCCTTAACC ATGGGGGGTT TTATTTTTGG GG 102

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 160 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1582:

TTCAGGGGAG CTGAACATAT TGACGACTTT TGGGTCAATT CATTTCGCAT TTTACTTTTA 60
AATGCGTTGT TGCATGTAAT TGTATTAACG ACATACATGG TGGGGCTCTA AATNAATGCT 120
TGACTAATTT CTTGGATGGA GACCACGATT TACCAACTCA 160

(2) INFORMATION FOR SEQ ID NO: 1583:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1583:

TAAAAGCAAG TACATTAGAG GTTAGATCAC AAGCTACTCA AGACTTGAGT GAATATTATA 60
ATAGACCGTT CTTTGAGTAT ACAAATCAGT CAGGATATAA AGAGGAAGGA AAAGTGACGT 120
TTACTCCTAA TTATCAACTT ATAGATGTAA CTTTAACTGG GAATGAAAAG CAAAATTTTG 180
GTGAAGATAT TTCTAATGTA GATATATTTG TTGTAAGAGA AAATTCTGAT AGATCTGGTA 240
ATACAGCTTC AATTGGTGGT ATTACTAAAA CAAACGGTTC AAATTATATT GATAAAGTAA 300
AAGATGTAAA TTTAATAATT ACTAAAAACA TCGATAGTGT TACATCAA 348

(2) INFORMATION FOR SEQ ID NO: 1584:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 73 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1584:

AGCCAGCAGT AGATAGATAT ATTAATGAAT TCTTGGAGAA AGGTAGCTCA AATTGTCCAA 60
TTGAGATATT GAA 73

(2) INFORMATION FOR SEQ ID NO: 1585:

- (A) LENGTH: 255 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1585:

10 GTAAGGAATG GTCACGTATT CCACACTTCT ATATGAATTA TTATGTATAT CAATACGCAA 60
 mTGGTTACAG TGCAGCTCAA AGCTTAAGTC ATCAAATTTT AnCAGAAGGT AAGCCAGCAG 120
 TAGATnGATA TATTAATGAA TTCTTGAAAA AAGGTAGCTC AAATTATCCA ATTGAGATAT 180
 15 TAAAAAATGC TGGTGTAGAT ATGACAACAC CTGAACCAAT TGAACAAGCT TGTGAAGTTT 240
 TTGAACAAAA ATTGA 255

(2) INFORMATION FOR SEQ ID NO: 1586:

20

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 25 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1586:

30 TTATTAGGTG AntCCATTGG CAACATTGAT TGGTTTGTCa TTAGGACAAA TTTTATTATA 60
 CATTGGCGTT ATTTTACTA TCTTATCTGG TATTGAATAC TTTTATAAAG GTAGAGATGT 120
 TTTTAAACAA AAATAAATAT TTGTTTATAC TAGATTTCAT TTTCATATGG AATCTAGTTT 180
 35 TTTTAATCCC AATTTTAGAA ATTAGCCACG CAATTGTTTA TAATGATATA TTGTAAACA 240
 ATATTTGTTC ATTTTTTTAG GGAAAATCTG TAGTAGCATC TGATACATTG AATCTAAAAT 300
 40 TGATGTGAAT TTTTAAATGA AATACATGAA AAAATGAATT AAACGATACA AGGGGGATAT 360
 AAATGTCAAT TGCCATTATT GCTGTAGGCT CAGAACTATT 400

(2) INFORMATION FOR SEQ ID NO: 1587:

45

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 561 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 50 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1587:

55 CAAAGCGTCT ATTATTGTTT GATTTTGATG AAACATATTT TAAACATAAT ACAAATGAAG 60

AAGTGATCAC TGCTGTATTG ACAGGAAGTA CATTTCAAAG TGTCATGGAT AAaATGGATC 180
 AAGTTAATAT GACGTTTAAA CCATTACATA TCTTTTCTGA TTTGAGTTCT AAAATGTTCA 240
 5 CTTGGAATAA TGGCGAATAT GTTGAATCAG AAACATATAA AAAGAAAGTC TTGAGCGAAC 300
 CATTTTTATT TGAAGATATT GAAGATATAT TACGTCATAT TTCTGCGCAA TATAATGTCTG 360
 10 AATTTATTCC ACAAAGAGCA TTTGAAGGTA ATGAAACACA TTATAATTTT TATTTTCATT 420
 CAACAGGTAA TCACAACAAT GATAGTCGTA TCCTAGAAGC ACTnnTCAGA TACGCAAATG 480
 ACCAAACTA TACAGCGAGA TTTAGTCGAA GCAATCCATT AGCTGGTGAT CCTGAAAATG 540
 15 CGTATGATAT TGACTTCACA C 561

(2) INFORMATION FOR SEQ ID NO: 1588:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 79 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1588:

CCAACAGTTT TATCATTATG GCAAGTTCTG TTAAACCTGC TGAGAGTTAT TTTGCACTGA 60
 30 TTGCAAAACC AGAAATTGG 79

(2) INFORMATION FOR SEQ ID NO: 1589:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 73 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1589:

GCAGATATGC AGCAATTTAT AGAGGACTAG TAAACGCATA TATGACTTAC AGCTTTCAGA 60
 45 CAAATAGCTT TGC 73

(2) INFORMATION FOR SEQ ID NO: 1590:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 71 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

TCATTTTATG GTTGATCATA GGCCTCGTCT TTTTCCTTGG GGATTTTATC TTAAATACA 60
CAGATTGGCG C 71

(2) INFORMATION FOR SEQ ID NO: 1591:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 78 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1591:

ATACAATACA ATTACACCA TATATGGATA AAATGCAAGA TGCAATTACT GCAGTTGCAC 60
AGTGCAAGTA GCAATACC 78

(2) INFORMATION FOR SEQ ID NO: 1592:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 168 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1592:

CCAATTAATT AAAAACCGGA AAACCAATTT TTAAACCAA TTAAGTTAAA AATTTTTTAA 60
AATTGGGCCC CAAACCTTGG AAAAAGGTTT AATTTTCCTT TCCAATTTT CCCAAAATTT 120
TTAAACCCAA AAATTCCCGG TTTGGGTTA AATTTCCCTn GGTTAAAT 168

(2) INFORMATION FOR SEQ ID NO: 1593:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 117 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1593:

TGCTAGAAAG TATAGAACCT GGTTCAAACG CATGGTTTTA TGTCCTTTT TAAACnGATG 60
TTTATTAAAA AAATATGGAA ATTGGCCACG TCCGCCAATT TCCTTAGAAA AGAACGT 117

(2) INFORMATION FOR SEQ ID NO: 1594:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 66 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1594:

AGACGAAGCC AAAAAGTTAT TCGCCAAATC TGAAATATTT TCAAAGACCT TAAAGGCGTA 60
AAATAC 66

(2) INFORMATION FOR SEQ ID NO: 1595:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 100 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1595:

ATTTTATTTA GGCCAATAAC TGnCTACTTC TGAAATAAGT TGCTTTGCAT AGTCTGACGC 60
GGGATGTTTG GATAATATCT TCTGTGTTAT TGCATTGCAA 100

(2) INFORMATION FOR SEQ ID NO: 1596:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 73 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

30

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1596:

GACCAGACGG CCGTAAACCT GGATGAAACC GTCCATTAGA TTCTGAAGTT GGTATTTTAC 60
CTAGAACGCA TGG 73

(2) INFORMATION FOR SEQ ID NO: 1597:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 66 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

45

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1597:

CTTTATAAAA TTGTCITTGA CTAACAGGAT TTTCAACGCT ATTCACAAAC CATGGTTTAA 60
CATATT 66

55

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 139 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1598:

TATGGCACCC TCTTTGATnT TGTGACCGTT TTTGGTAATT CACCATTATT GTACGAACCA 60
 TGGAATTTCGC TGCCTTCCTT TAGGCAATAA CATAATTATA TTTATCCCCT TCTTGTCCT 120
 AGAGGTGCTG ACAACACCA 139

(2) INFORMATION FOR SEQ ID NO: 1599:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 101 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1599:

CTCCTCTGCA TGCACATCTT GTTGTAGCAA GGTTCACATG TAATTTATTA AATCGAACT 60
 CTATCCAACCT ATGTTATAAA GTTCATTCTA AACAAATnAG T 101

(2) INFORMATION FOR SEQ ID NO: 1600:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 172 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1600:

TTGTACCAAG GTTCACATGT AATTTATTAA AGCGAAACGC GTATCCAACCT ATGTTATAAA 60
 GTTCATTCGT AAACAAATAA GTATAAAAAT TCAATATTTT TATTACTAGA ATATGGTTAA 120
 ATACATTTAT TTCTTATAAn AATTTGATGT TTAAGATATT TTGCCAAATT GA 172

(2) INFORMATION FOR SEQ ID NO: 1601:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 112 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1601:

5 TTGGCACTGG CCGTCGTTTT ACAACGTCGT GCACTGGGAA AACCAAACA CGACGTTGTA 60
 AAACGACGGC CAGTGCCAAG CTTGCATGCC TGCAGGTCGA CTCTAAGAAG GA 112

(2) INFORMATION FOR SEQ ID NO: 1602:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 679 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1602:

20 TGCAATGGTT AATCATCTCA TATAACAACA CATAATTTGT ATCCTTAGGA GGAAAACAAC 60
 ATGACAAAAC ATTATTTAAA CAGTAAGTAT CAATCAGAAC AACGTTTCATC AGCTATGAAA 120
 AAGATTACAA TGGGTACAGC ATCTATCATT TTAGGTTCCC TTGnATACAT AGGCGCAGAC 180
 25 AGCCAACAAG TCAATGCGGC AACAGAAGCT ACGAACGCAA CTAATAATCA AAGCACACAA 240
 GTTTCTCAAG CAACATCACA ACCAATTAAT TTCCAAGTGC AAAAAGATGG gCTCTTCAGA 300
 GAAGTCACAC ATGGATGACT ATATGCAACA CCCTGGTAAA GTAAATTAAAC mAAATAATAA 360
 30 ATATTATTTT CAAACCGTGT TAAACAATGC ATCATTCTGG AAAGAATACA AATTTTACAA 420
 TGCAAACAAT CAAGAATTAG CAACAACGTG TGTTAACGAT AATAAAAAAG CGGATACTAG 480
 AACAAATCAAT GTTGCAAGTTG AACCTGGATA TAAGAGCTTA ACTACTAAAG TACATATTGT 540
 35 CGTGCCACAA ATTAATTACA ATCATAGATA TACTACGCAT TTGGAATTTG AAAAAGCAAT 600
 TCCTACATTA GCTGACGCAG CAAAACCAAA CAATGTAAAC CCGGTTCAAC CAAAACCAGC 660
 40 TCAACCTAAA ACACCTACT 679

(2) INFORMATION FOR SEQ ID NO: 1603:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 85 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1603:

50 CATTTTAATT GATATAATTT AGACTTTAAC ATTTTCATGCT GTTCACGGTT TTAATTTGAG 60
 55 ACGTCATTTG GTATAACAAC TATAC 85

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 68 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1604:

ACTGGTGTGA ATAGCTCCAG CAATTTCTTT AACCGCGATC ATAATCAACG TCACCTTTTA 60
ATTTGCCA 68

(2) INFORMATION FOR SEQ ID NO: 1605:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 109 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1605:

TGGGGGGTtT TTTTGGGTTG GGTAAAAAA AGGGAATTGG CCCAAGGGGG GAATTCCTT 60
AAAAAACCC CCAACCCCT TGGGAAATTA AAAATTGGGT TAACCGGGA 109

(2) INFORMATION FOR SEQ ID NO: 1606:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 112 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1606:

GCTTATATAC ATGTTCCATT ATAAAAGGAG TACGAACGAA AGTAACGCAT GACGTTAATT 60
TAAAAATATT GTAATAATTA TGGATTAAAT TTAAAACCA GGGGTATTCC AT 112

(2) INFORMATION FOR SEQ ID NO: 1607:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 106 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1607:

GTTCAAGTTG GTAACCTAAC AACACGnAAT TAGTTTAAAC GTTTGG

106

(2) INFORMATION FOR SEQ ID NO: 1608:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 83 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1608:

CACACTGATA CCATAGGATT TATGATAGAT CAACAGCATG ACCAAATGTA TGACCTAAAT 60
TTAAAAATT ACGTACACCT TGT 83

(2) INFORMATION FOR SEQ ID NO: 1609:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 132 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1609:

AAAAGAATAA AGTCACTGAA CAATGGTCTT TCACAATGAT GTTGGCGTCAA TGCACAAGCG 60
CATTATGTnt GTGACTTGGG CATTTTGGCT TATCAGCTGA ATATTATACG CATTTACATC 120
CCAATTAACG TA 132

(2) INFORMATION FOR SEQ ID NO: 1610:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 107 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1610:

TTTAATGCAT ACGCTTCTCG CTTAGCAATT TCTTTGCACG TCTAACAAGC ATTAACGCTC 60
TTAnTACTAT AATCACAACA AAACCAGCGA AATATAACAT GCGTATA 107

(2) INFORMATION FOR SEQ ID NO: 1611:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 84 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1611:

5 TTCGCACCTG GTATCGTTCA AACCAACCAAT GATGGCCCGT CTCGCCGTGG CAACAGCCGA 60
AGACCGCAGG TAAACCCTGA ACGC 84

(2) INFORMATION FOR SEQ ID NO: 1612:

10 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 127 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1612:

20 ACTCACATGT ACGATAACAC CCTTCGTAA TCCATCTTG GTTTGCCAAG TTCGTCGTTG 60
TAAACTGTCT ATACTCGTTA AACCGCTACA TGTTTTCCTA AAnCCTGTGC CTAAATGCTT 120
TACTGAA 127

25 (2) INFORMATION FOR SEQ ID NO: 1613:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 129 base pairs
(B) TYPE: nucleic acid
30 (C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1613:

35 CGTTCAACTT TTTCAATTTC TAACGGCGTT TTAATATCTT TATCTGTAAC TAATTCAACT 60
CCAAACATTA AGCCTCGTCC TCTTACATCA CCAACATTTT GATGACGCTT CAGCGCATGT 120
40 AACTGTTTC 129

(2) INFORMATION FOR SEQ ID NO: 1614:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 348 base pairs
45 (B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1614:

nCAACTAGTG GATTTAAnAT AnACATAATT ATAAATGCAA ATGCTAATAG CTGAATACCC 60

GCACTAGGTG CATAATTGT GTATTGAGCA AATAAGCTA ATACAATGAT TGTAATTCCT 180
 TTAATGACAA ATAAAGGTAA ATTTAATCGT TTAAAGGTT GGTAAATTAA AAATACAATT 240
 GCAGCTATAT GCGAGCCACT AACTGCCAGC AAATGATATA TACCTATCTC TTAAACACGT 300
 TCCTTAAATT GTCATTAAC TTCTTTTACG TCACCAGTAA TCAATGCC 348

(2) INFORMATION FOR SEQ ID NO: 1615:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 72 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1615:

GCAGTCCACC GCGGTGTCGC CCGCTCTAGA ACTACTGGAT CCCCCGGGCT GCAGGAATTC 60
 GGCACAGCAT AT 72

(2) INFORMATION FOR SEQ ID NO: 1616:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 63 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1616:

CATCACGTTA AATCATAACG CGTGACGTGC TTTTGCTATT TGTCTCTCGG TATCTCTATA 60
 TCT 63

(2) INFORMATION FOR SEQ ID NO: 1617:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 113 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1617:

ATTGAATTCA AGGGTGGAAC TCATGAATTG GCTGGAAAAA GGTAGATTTA ACTGGATGGT 60
 TGnAGCCATA TATCGGTGCG TTTATTTATT TGGTATTTTA AAAATCAACC TCG 113

(2) INFORMATION FOR SEQ ID NO: 1618:

(A) LENGTH: 80 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1618:

GTACAATAAA GTGGTAAACA ACATGCCAAT GGAAAAAGGG ATTAAAGGTG TTTATGTCAT 60
 TCTTAAAGAT AGTAACGGTA 80

(2) INFORMATION FOR SEQ ID NO: 1619:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 117 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1619:

ATCTTATGTT TTTTTCCTAA AACTTCTGCT ACTTCATTTA TTTGATGTAT GGTAGATAAT 60
 TCTGTTTGGA TACTCATATC AACTTTTTTCT ATCATATCTG AAATCTCTTT TnTGGCA 117

(2) INFORMATION FOR SEQ ID NO: 1620:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 107 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1620:

CGATAAACCC TTCGTAATCA ATCTTTGGTT TGCCAAGTTC GTCGTTGTAA CAGTCTATAT 60
 CGTTAAAGC TACATGnTTT CCTAAGCCTG TGCCTAATGC TTTACTG 107

(2) INFORMATION FOR SEQ ID NO: 1621:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 63 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1621:

AATATCGTGT CTCTGTCCAG TGCTGTCCAA TCAATTTTGA TCCACCGATT GTCATACGTA 60

(2) INFORMATION FOR SEQ ID NO: 1622:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 75 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1622:

ACCATCTGAC ATCATCAATT ATGAATTAAT GATGATATTA AAAATAAATT TGAAACATTG 60
CCAATTGATA GTGCC 75

(2) INFORMATION FOR SEQ ID NO: 1623:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 78 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1623:

TACCTGTGTA TCAGCTCTAT TAACAACCTA ACATATGTGA ATAATTGCG ATCCTTGTTG 60
ATAATGCTGT AATTGAC 78

(2) INFORMATION FOR SEQ ID NO: 1624:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 95 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1624:

GCAAGCTTTT GCGGCTTCTG ATGCACCATT AACTTCTGTA ATTAAACACA CAAAGTGAAA 60
CAGGTAGGTA ATGCAAAACT GCAACGGACA ATCGA 95

(2) INFORMATION FOR SEQ ID NO: 1625:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 76 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

ATTGCGATTA CACAGTAGTG AATGAGATAT TTGACATGAA AGCTCCTGCA GCTTCTAAAG 60
AAGAGTTAGC AGGTTT 76

(2) INFORMATION FOR SEQ ID NO: 1626:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 126 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1626:

AAAAGCTAAA AAAGATTATC AGGTGTATCA CAAACTCAAA TTCTCATTAC CATTTATCTC 60
AGTGTGAACG TCTTAATTGA GAACTAATCT AATTGAGAT ATTAGTCATA TAAGGATGGA 120
CAAGCA 126

(2) INFORMATION FOR SEQ ID NO: 1627:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 116 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1627:

TGATACGATA GAACATAGTT CAGCACATTG TTGTGTGAAA TTGGATATTA CCGCCATTTT 60
TTCACAATAT CAATAATACC TGAACGTGTT GGTtTTTCCA CATTATGATT GTACAT 116

(2) INFORMATION FOR SEQ ID NO: 1628:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 91 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1628:

ATTTTGTCTT ATCTTGAACA AATCCGATTT TTCTCAGACA CTGAATCCAA AGTATTCATG 60
TACCATAAAC CATCTGCATG TTGATTTATG C 91

(2) INFORMATION FOR SEQ ID NO: 1629:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 400 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1629:

	ACAGAAAGTC AAACAGTAAA AGCGGCAGAA TCAACTCAAG GTCAACACAA TTATAAATCG	60
10	TTAAATACT ACTATAGCAA GCCAAGTATA GAGTTAAAA ATCTTGATGG TTTGTATAGA	120
	CAGAAAGTGA CAGATAAAGG AGTATATGTT TGGAAGGATC GAAAAGATTA TTTTGTGGC	180
	TTGCTTGGA AAGATATTGA AAAATACCCT CAAGGTGAGC ATGATAAGCA AGATGCATTT	240
15	TTAGTCATCG AGGAGGAAAC TGTTAATGGA AGACATATT CAATTGGTGG TTTAAGTAAG	300
	ACAAATAGTA AAGAATTTAG TAAAGAAGTC GATGTTAAAG TAACAAGAAA AATTGATGAA	360
20	TCATCGGAAA AGTCTAAAGA TAGTAAATTT AAAATTACTA	400

20

(2) INFORMATION FOR SEQ ID NO: 1630:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 400 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

25

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1630:

	GCTTTCCTTT TCGAAATCTA TAAATCTAAT CCATTGAAGT AAATAATTA TGATAATTAT	60
	TAATTCTATA ATTGTnGTTA TCTTTAAATA ATTTGGAAAC CTTTCATAAT CTAAACCAA	120
35	AAAGAAAGTT AGACATGAAA AAAGTATCAT AAATAATGAT GCTAAACTTA AGGCTTGTGC	180
	ACCTGGCTTT CGAAGAAATGT CTATATTTTC CTTAGTAGTC ATATTTACCT ATCTCCTATA	240
	CATTGATTTT GTAATAGCAT ATTAAGTATT TAAAGTTATA AGTACTTAGA TTCTTTTCGA	300
40	TTAAAAGTAT AAAAGCCTAA AATTATCTTT ATATTATTAT TTGATGACAA CTTTATGGTC	360
	TCTATTGTTT TTTACTTAAA CGCTAAAAAG CTAAACAAAG	400

45

(2) INFORMATION FOR SEQ ID NO: 1631:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 70 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1631:

55

TCTAGAGCGA

70

(2) INFORMATION FOR SEQ ID NO: 1632:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 62 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1632:

CAACGAAGAT ATTCAAGTGT TCAGTCATTA TTTTGGACTG CTAATGAAAC TGATTCTTGT
GG

60

62

(2) INFORMATION FOR SEQ ID NO: 1633:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 81 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1633:

CTAATGATTA GATTCAAAC AATAAGACT ACAAAAACAA GTTGATAATG GTAAAGATAT
TATCCAACTT GACATCTAAA G

60

81

(2) INFORMATION FOR SEQ ID NO: 1634:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 63 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1634:

AATTCACCT TTGTCTAGTA ATTTATTTGT GTAGTGTAAT CATTAATTGT TTAAATATCT
AGT

60

63

(2) INFORMATION FOR SEQ ID NO: 1635:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 579 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1635:

	ACCAACTAGC TAAATGCCAG CGCGGnATCC ATCTCAnAAG TGCACAGCAA GACCGTCTTT	60
5	CCAACTTTTG AACCATGCGG TTCAAAATAT TATCCGGTAT TnAGCTACGG TTTCCCGAAG	120
	TTATCCCACT CTTATAGTA GGTATCCCC AGTGTACTC ACCCGTCCGC CGCTAACATC	180
10	CAGAGAAGCA AGCTTCTCGT CCGTTCGCTC GACTTGCATG TATTaGGCac GCCGCCAGCG	240
	TTCATCCTGA GCCAGGATCA AACTCTCCAT AAAAATTATG ATGTTTGATT AGCTCATAAA	300
	TACTAAATAA TGTTTGTAAC TAATAGTTAC GTTTTGGAA TTAACGTTGA CATATTGTCA	360
15	TTCAGTTTTC AATGTTCAAT AATGTTCAAT CTCTTTTATT CTACTTCATT TATTTCTTGA	420
	AGTCAATAAC TTTTGAACG ATTACTTTAT TTATTCTATA TTGTTTTTAT AGTTATTTCA	480
	ATGGtAAGTh TTACACTTTT GaaATTCTTC TTTAAAAACA ACTGCGTCGt TTTTGaCGcT	540
20	TTATCaTATT ATCmACTTTG GGaATTtAAA GTCAATAAC	579

(2) INFORMATION FOR SEQ ID NO: 1636:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 69 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1636:

	TCGACATTAA GCAACGTTCT TCGCAAAGG TAGCGAGCGA CACGAGTTAA CTTTGCACGT	60
35	TTCATTATT	69

(2) INFORMATION FOR SEQ ID NO: 1637:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 116 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1637:

	CTGTGACTTC GTCGCGATGA CCTTCGCCGT TGTTCTCATG GTAAGCTTTA AGTATCGTCG	60
50	ATGCAGTCnG TTCGCCATGT GCGCCAGCAG ACTGGTTGTA ATGTCGCCTC GTCCGT	116

(2) INFORMATION FOR SEQ ID NO: 1638:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 71 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1638:

ACAACATTTA GGTACTTTCA CGCATATCAC TACAGCTCAA CGTGATGATT TACCAAATCA 60

10

AATTTACAA G 71

(2) INFORMATION FOR SEQ ID NO: 1639:

(i) SEQUENCE CHARACTERISTICS:

15

(A) LENGTH: 73 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1639:

GCGTGGCTTT GTGATTAACA TTGACAAGCA CGTGCAACAA CATATTCGAC GCGATAAAGC 60

25

GACATCTAAT ATT 73

(2) INFORMATION FOR SEQ ID NO: 1640:

(i) SEQUENCE CHARACTERISTICS:

30

(A) LENGTH: 400 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1640:

CGCGATCATT TTCATTTCTA ATTAATCTTC CAAGTCCTTG TCTAAAACGT GTAAC TG CAT 60

40

CAGGTAATAC ATATTCCTTG AAAGTTGAAG TGAATTCAGA ATCCATAAGC CAATATTTTG 120

CATTATGCTT GTTCATAAAC GGTAACCTCG CTATCATCAC ACATTTAATA CCATTTGCTT 180

GAAAATCAAA ACCTTCAAAA AATGTTGACG TACCAAGCAG TATGGCCTTA TCAAAATTAT 240

45

TAAACTGTTG TACTATTTTA TAATTTTGGT TCTGCTGTTG TGTTAATACA ACATAATCTT 300

CAAATTCTGG CAATTCATTT AAGCATATCT TGTACCATAT GCATCATTTT ATAAC TCGTA 360

50

AATAAGACTA AACATTTTGA TGACGTTATA GTCGTATATn 400

(2) INFORMATION FOR SEQ ID NO: 1641:

(i) SEQUENCE CHARACTERISTICS:

55

(A) LENGTH: 66 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1641:

ATTGTTGTAC CATGTATACT AACAAATTGTA ATGTCTCATT TCAGTAAACA AAAAGCGAAA 60
 GACATT 66

(2) INFORMATION FOR SEQ ID NO: 1642:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1642:

ATTTTCGTCGG GAATAAATTT TGCCATTACA TAGAAATATC TAATAGATAA CGAAAAAGTA 60
 TCGTATGTAT TTTTAATATA GTGTAAAATA TTATATGTAA AATAAAATGT AGGTTTTTTAG 120
 TTAGAGGCAT TATAAGAAATA TTTTGAGTAT AGGTTAGCTT TTAATTATGA ATCTTATTGA 180
 AATTTGATTA ATAAAAATAT GATAGGGGAT TAAATGAAA CTATTTTATA TCGTATTTCT 240
 TATTATTATA TGGCTGAATA TATTTTTAGG AAATGAAATC ATCCATACAC TGA CTGTTTTT 300
 AATAACAACA TTGTATATTG TTAATTCACG AATAGGGGATT AAAAATGACA GAGTTGAATA 360
 ATATTATAAA CGCGCTGCA ATCTTGTGTTT GAGTCCGGAA 400

(2) INFORMATION FOR SEQ ID NO: 1643:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 66 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1643:

AACTAGAGGA GGACATCCTA ATGGAAGCAA AACCCGTTGC TAGAACAATA AGAATCGCAC 60
 CTCGTA 66

(2) INFORMATION FOR SEQ ID NO: 1644:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 75 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1644:

TATCAATTTTC ATATGCGATT TGGCCTTGCA ATAATTAGGT CTCACCTTGC CATATCTTTA 60
 CCTAAGCAAT ACTTG 75

(2) INFORMATION FOR SEQ ID NO: 1645:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 70 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1645:

CATTCTCCTG CATCATAAAA ATCAACAATT GTATCATCAA AGTGTATCAA AATATTTTAA 60
 TATCCCAATT 70

(2) INFORMATION FOR SEQ ID NO: 1646:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 73 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1646:

AGTGACACTT TCGTTCACC ACATCGTAAA GAAGTACTTC AAGCACGTGA AGATGACATC 60
 AAAGAAAAAG TTG 73

(2) INFORMATION FOR SEQ ID NO: 1647:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 71 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1647:

CTGTGATTGG TGTGTGATT GTCTTGCTTC CTGGTGTCC TTCTTGTTTC GCTCGCTCTT 60
 CGCCGGGTTG T 71

(2) INFORMATION FOR SEQ ID NO: 1648:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1648:

AACTATAGAA AAATTCGGAA TTATACCAGA AATGGAATAT GAAATGGAAG AGGTTAAACA 60

10

AAACGAGCAA TATATTAGAG AGCAAGAAGA AGCTGGAACA ATAGAGGCGA TAACA 115

(2) INFORMATION FOR SEQ ID NO: 1649:

(i) SEQUENCE CHARACTERISTICS:

15

(A) LENGTH: 59 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1649:

TGTTGTCATG ATCTGAAAAG TCAAAGTCAA TAGAACATTG GCTTTGGCTT TTTATTGG 59

25

(2) INFORMATION FOR SEQ ID NO: 1650:

(i) SEQUENCE CHARACTERISTICS:

30

(A) LENGTH: 125 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1650:

35

ACCGATAATA GTACACGGCA TAATGNAACA ACTTGGCATG CACCCTTTTT ACGTTCCTTT 60

ATCTCTGCAT GATTGTCATG TTCATCATGG TTTGGCTTGC ATTAATAGAG AGGGTTGACG 120

40

CAGAA 125

(2) INFORMATION FOR SEQ ID NO: 1651:

(i) SEQUENCE CHARACTERISTICS:

45

(A) LENGTH: 71 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1651:

TGATTACGC GAATGCCACT TTTACTACCA ATGTTCCCAA AGCTGCTTCT GACAAACGCC 60

55

ATTGTACTCT G 71

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 60 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1652:

TCACTACATG CACCATAAAT ACAGTATGAA CGTATTGAAA TGGGCATTAC ATGATACAGA 60

(2) INFORMATION FOR SEQ ID NO: 1653:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 123 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1653:

TTAATTGAAA CAATTGACAA ATGCAATTG ACGCCAACT TTGAACTTTG AATGGATTAT 60

CACATTATGA TTGTTTATCC ATGGnCAATT AGCATGGACG TATTACATTC TGGATTATCA 120

AGC 123

(2) INFORMATION FOR SEQ ID NO: 1654:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 76 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1654:

CTATGACGTC GCATGCACGC GTAACCTGGG CCCCTCGAGG GATCCTCTAG AGCGGCCGCC 60

CTTTTTTTTT TTTTTT 76

(2) INFORMATION FOR SEQ ID NO: 1655:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 145 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1655:

TTTTAAATTT TCGTGAAATC GGAAATGTAC GATTAGTTAT TAAGCGTTAG AATGTGTGAT 120
ATGTGAACCT GGTATTGACG GCGCT 145

(2) INFORMATION FOR SEQ ID NO: 1656:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 73 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1656:

TTTAGAATTC CAATACGCTA TTGCCAGCGA TTTAGCCACT TGTGGGTAAT GATATTGAAG 60
GTGTTAGTCA AGT 73

(2) INFORMATION FOR SEQ ID NO: 1657:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 93 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1657:

CTTCTGAAAA GTAGTAATGT AACCTATTGG ATGCCAATGA ATCCCCAAAT TTAGTGGACG 60
TATGTGGCTT CATCTTCAGA ACCTGTATCT GGT 93

(2) INFORMATION FOR SEQ ID NO: 1658:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 58 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1658:

AAGTTAACAT GCAAGTTGAC GATGTAATGA CTCAAAAAGA GTGGAAACAA AAACACGA 58

(2) INFORMATION FOR SEQ ID NO: 1659:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 65 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1659:

TTAATCCCAC AAACAAATGT ATGAAATTGA GTCAGTGATA TTAAATATGG GCTTGAAAGT 60
 GTCTA 65

(2) INFORMATION FOR SEQ ID NO: 1660:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 91 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1660:

TGCATTTTTG TAAGAACGCA AAGCATTGTA AATTAGTTTT TATAAATTAG GATATTATCA 60
 TGTGTATTGA AAACAATGAA GTGTGCTATG A 91

(2) INFORMATION FOR SEQ ID NO: 1661:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1661:

ACATATCTGT CCACACAACA AGGACCATTT GTCTGAAGGG ACAGTGAGTG GGGAAATATGT 60

(2) INFORMATION FOR SEQ ID NO: 1662:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 169 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1662:

TGGGGTTTTA ACCAGGGGAC CTAAAACCAG CCCCCATTTT CCAAGTTTGG ACCCCAAATT 60
 CCCnAAATTT AAAAAAATT TGTTTGGGGT CTAAGTTGGG CCGGTGCCTT CCTGCCTAAA 120
 TTTAGCCCAT GTCTAACATA GTACTTTGGG AACGTAAAAG TTTAATTTA 169

(2) INFORMATION FOR SEQ ID NO: 1663:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 677 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1663:

	TGGCACAATT GCACCAATTA AATGAATAAC TTTATCATTT TTATATACAG GTACAACAAT	60
10	CGCTTCTTTT ACGAACTCAG ACTGGCGTAA TTGTGTTTCA ATTTCTTCTA ATTCCATTCT	120
	GTAGCCATTG AATTGATTT GGAAATCAAT ACGACCTTGA ATGAACCATT GACCATTTTC	180
	AAACTTCGCT TTATCACCAG TGTGATATGT ACGAATACCG TCATCGAAAT TAAATACTTC	240
15	AGCTGTTTTT TGGTCATTTT TTAAGTATCC TAAACTTACA CTTTGACCTT CGATAACAAG	300
	TTCACCTTCA TCTGTAGTAG ATAATCTTGC GCCTGGTCTT TCAACGCCAA CAGGTAATGT	360
	CGGATATTGA TCTAAGATTT CTGTGTAAAT TTGAATACTT GTAAGTGCTA CCGTAGCTTC	420
20	AGTTGGACCA TATGTGTTGT AAATCGTCGC ACTTGGGAAA CGGTTTACTA ACGCTTTTGC	480
	TGCTCTGTGA GGTAGAATTT CACCACAGAA GAAGAATTCG TTAAGACTAC CATATTGTTC	540
25	TTCATTAAAGC GTTGGAATA ATAAACACAT TTCCATAAAT GATGGTGTG ATACCCAAAT	600
	GTTAATCGGT GTTGCTGTTA GCATTTTATT TAATAATTTA GGTTTATTAA TCATGTTTTT	660
	ATCTACAAGA nTrAAnG	677

30

(2) INFORMATION FOR SEQ ID NO: 1664:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 62 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1664:

40

GTTACAACAA TAGTGGTATA AAACGGGAGC AATTAGAGAT CAATATATGA TTATTAAGAG	60
CA	62

45

(2) INFORMATION FOR SEQ ID NO: 1665:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 342 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1665:

55

GTTTACGCAA ATGATAGCTC GGTA AACAT GAGCAACATG TTGAAGCCAA TTTGGAAATG 120
 TGTTTATCGG AAACCACAAT CCACCTAATA CTGCTAAACC AATTGTTACG ATATTAGCTA 180
 5 AAGCACTTGT TTTTGAATA TCATTTAACA AAGAACCATA ATATGCCAAA AGTTATTAAT 240
 AGAGACGCAC CTAACCATAA AAATATTCCT GACTCTAACC ATTGAAGTGC ACTCATTGCA 300
 ACACCTTTAT AAAAATGTCC AACCATAAAA ATA ACTAATA TC 342

10 (2) INFORMATION FOR SEQ ID NO: 1666:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 102 base pairs
 (B) TYPE: nucleic acid
 15 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1666:

GTCCAAGAAT TCAAAAACGT TTTCAACTTC GGCCAAAGCC CAATTTnTCT TTGTGGTTTA 60
 ACTTTTAAAT TTTGAACGTT TTAGGGCATA AAAAAAAAAA GG 102

25 (2) INFORMATION FOR SEQ ID NO: 1667:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 122 base pairs
 (B) TYPE: nucleic acid
 30 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1667:

35 TTGATAGTAG CCATAATCAT ACCACTTAAA TAATATGTTT GATCATCGGC ATAATTTTTA 60
 TTTATTGTCT GTTCGCAATA TTTTGAGCAT TATCATAATT ACCACTAGTC ATATCATCTT 120
 40 TG 122

(2) INFORMATION FOR SEQ ID NO: 1668:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 57 base pairs
 45 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1668:

AGAGATGAAA TTAAATCGC AATTGAAAAT TTCAAATCAC GATGAGAGTG GGACAGA 57

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 70 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1669:

AACTACTGCC AATATTAATA GCATTGGTAC ATCTTAGAGG CATTGAATTC CTTACTCAGA
CTCATAATGC

60

70

(2) INFORMATION FOR SEQ ID NO: 1670:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 73 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1670:

TTGTCTGATA TAATCCATTT CGATTGGACT CCACACGTTA CACCGATACC TTCTTTACCA
GCCCCGACCCG TAC

60

73

(2) INFORMATION FOR SEQ ID NO: 1671:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 140 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1671:

GAAGAATTGT ACTGTAAAG TGA CTCTAAA CTATCGCGGA AATAACAGTG AAATCACCAA
TTAGACTAGC GACACTGAAG TCATTAAAAA CAGACATTTG TAGTGGTGCT CTTATCACCG
CAAATACAAG AGAGTTTCTC

60

120

140

(2) INFORMATION FOR SEQ ID NO: 1672:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 59 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

AACAACGTTT ACTATTGGCA CAGAACGGTT GGTACTTAGT CTAATACCAT TGTCATCAA

59

(2) INFORMATION FOR SEQ ID NO: 1673:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 124 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1673:

ATCTCTTTGA CTTGAAGGAT TGGATTTAAA TCTTGGTGAT TTGGGCCGTG AAATATTTCC 60
 AGAAAATTCC TCAGACGTAT TAGTATAATT GTAACGnTAC ATTCTAATAT ACCTTTCTTC 120
 GATG 124

(2) INFORMATION FOR SEQ ID NO: 1674:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 109 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1674:

CACCACCACC ACACACACAC ACACAAACAC ACAACCCCCC CACACACAAA CCACACCACC 60
 AACACACCAA CACAnCACAA AAACCCACCA CACACACCAC ACACCAACC 109

(2) INFORMATION FOR SEQ ID NO: 1675:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 101 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1675:

TnGTCAACTG ATTTATGAAA TGGCAGAGCA TATGGCGTCA AAGGTTCTTA ATCGTTAAGC 60
 CAGACCACTG GAGGACCATT AGATGCAGCG TTGCTTTCAA G 101

(2) INFORMATION FOR SEQ ID NO: 1676:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1676:

TTTTAAAT TTGAAAATT TAGACCTTAT TTCACGTGCG ATTTAATCGA TGTGTTAATA 60
 5 AAACAATACT GGCATTCAAC ATGTAATCCG ATAATAAAAT AAGGTTGCAA TTATGTTATT 120
 GCATATTTTG TTTATTACTT AGAATAATAC GATGGTTAAG ATGAAATATA TGACAAAGAT 180
 10 AAATAATGAC ATTAAATTCA AGATGTTTAC GCCTTTTAGA TCTTTTITAA GCATTTTAAA 240
 TCCTGTCCT TCKACATTAC CGACTAAGAG TAATAAGACG ATAAATACCC ACCAATTsTC 300
 TTTTGGAAAA CTCATCGTCG TTAATGCTAA GACGAATAAT AACACACAC CCATAATAAT 360
 15 TCTCAAATG CGAGTAAATA CAACTCCAT TTTAAAAATA 400

(2) INFORMATION FOR SEQ ID NO: 1677:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 64 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1677:

TCTTACTCAT GCATATGAGT GCAAGGGCCT GAGCATTCAT CAGCAAGATT AGAGCGATT 60
 TTAC 64

(2) INFORMATION FOR SEQ ID NO: 1678:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 65 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1678:

ACAGCTGATT TATTAAATGA TACTAAGTCC AAAGGCATGC GCATTATATC AGTTGGTACA 60
 TTTCA 65

(2) INFORMATION FOR SEQ ID NO: 1679:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1679:

5 AGCGCCACCA ACTGACGAAT TAGGTGGTAG TTGGACACTA TGGAAAAATT TAGCGCGACA 60
 AAGTCCTGAA TTTGGTAATC CTGATAAGTT TTGCCAAAAT ATTCCTA~~n~~AA AAAGTTGGTT 120
 TGTTCAGCA ACTTCTACAA CAAACAATAA AGAGATTATC GATACAATAG AAAGTATTG 180
 10 TAAACGTGAC CCACTTGGCA GGCAAAACAG TTACAGGCGG TATTATTACA ATCAATGATT 240
 CTGcATGGCA AATGAGTTTT ACAATCAATC GTGCAGCAAC AGTTTGAAAG ACCAACCTGG 300
 AAAATGGAAA TATCTACATG GGGTTTGATG CCTTATGATT CnGGnGTAAA CGGCGGTTGA 360
 15 TG 362

(2) INFORMATION FOR SEQ ID NO: 1680:

(i) SEQUENCE CHARACTERISTICS:

- 20 (A) LENGTH: 69 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1680:

AGATACTTCA GATTTAGCAT CATGAAGCAA CTTTAAAAGC AATCGCTGAC GCTGGTATTC 60
 30 AGCCCGAGG 69

(2) INFORMATION FOR SEQ ID NO: 1681:

(i) SEQUENCE CHARACTERISTICS:

- 35 (A) LENGTH: 56 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1681:

40 TAACCATTTT TTTTGACGTT TTATGTTGTT TTAAGAAATA AATACCAGTT AATGTA 56

(2) INFORMATION FOR SEQ ID NO: 1682:

(i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 56 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1682:

55

(2) INFORMATION FOR SEQ ID NO: 1683:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 109 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1683:

CCCCAACACA ACAACAACA CACCCACCAC CCAACCCAC CACACCCACC CACCACCCCA 60

ACCCACCACA ACACCACnCA CCAACACACA CCACACAACA ACCCCACAC 109

(2) INFORMATION FOR SEQ ID NO: 1684:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 62 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1684:

ATTATGTTTCG CGATAATTTA AGTAAAAGAA GCACAGATAT TGAATTTGAT AGGAGTAATT 60

GT 62

(2) INFORMATION FOR SEQ ID NO: 1685:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 57 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1685:

CATAAGGTAC TTAAATTAAG GCATATCTGC TGTCTAGCAG TCGCATAAAT CATTAGA 57

(2) INFORMATION FOR SEQ ID NO: 1686:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 56 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1686:

(2) INFORMATION FOR SEQ ID NO: 1687:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 110 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1687:

CTTTATAGTA TATTGCTTTT TGTTTTCTT TTTCGTCATA TTTCACTTTT AAATAGATAC 60
 CTGCAACACT AATTAATATG ATTAACATAA TACTAGTTAA TATTAAnATT 110

(2) INFORMATION FOR SEQ ID NO: 1688:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 214 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1688:

AATTACTAGT CTGCTTGTC AAGATTATT TATATTCTAG CTCAACATTA ATTTCTTTGA 60
 TTTTGGTACC ATCTATCGTG TCACCCATGC GATGCGGTTG TAGTTTTTTT GTAAGTTCTGA 120
 AAGTATAAAA CTTATCATCT TCCATTTTAA CTACAATTTT ACCTTTTCTA TTATTAACAG 180
 CACCATATAA TTTTCTTCT TCCATCAATT TTTT 214

(2) INFORMATION FOR SEQ ID NO: 1689:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 59 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1689:

GCTAGTTGTA ACGTGCTTTT TCACCACCAG ATAAATCATA ATATCTTTTA ACATCTCTG 59

(2) INFORMATION FOR SEQ ID NO: 1690:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 55 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1690:

CCAAACTTTA TAATATGAAA TGCTTGGTAA TTACAAAGAT AAAATCATAC TCACG . 55

5 (2) INFORMATION FOR SEQ ID NO: 1691:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 64 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1691:

TAGACAGCAA TCCATTGCTA TAGGGGTGGA TATCTCATT GCGTTTGGAG CTGTGCTTGT 60

TATG 64

20 (2) INFORMATION FOR SEQ ID NO: 1692:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 57 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1692:

TGCATGGGAT TGCAGCTAAG AGAATCATAA AAATATATTA CTTTAATAAG TGTAGTA 57

(2) INFORMATION FOR SEQ ID NO: 1693:

35 (i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 74 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1693:

45 CGATGTGTAC GTCTCACTG ATTTGCGACG GTAAGCTAGT GCATATTCAG CACCGCTACT 60

CGCCCAGCCT AGAC 74

(2) INFORMATION FOR SEQ ID NO: 1694:

50 (i) SEQUENCE CHARACTERISTICS:

- 55 (A) LENGTH: 162 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1694:

5 AACTTTTCAG ATGTTGATAG CTATAGATTT AGGCGCTATT CACCA~~n~~GTCT ACATGCAATA 60
CGTACGTTAT AATGCACTGC AACGAATCGC GCGTTATGAG TTGGTAATTG TTGTTCAATA 120
TTGGGTGTAT AGTTTTCAAC GTGGTTACAA GCAACTACCT AA 162

10 (2) INFORMATION FOR SEQ ID NO: 1695:

- 15 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 55 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1695:

20 AATTATCTCT ACACCTTTTC TTTCACATAA TTGACGCAAT ATAATCCCTA TATCT 55

(2) INFORMATION FOR SEQ ID NO: 1696:

- 25 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 56 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1696:

ATGCAACGTT GGCATTGGGA AATGGTCCTG CCTAAATTAA CACGCAATAA AATGTG 56

35 (2) INFORMATION FOR SEQ ID NO: 1697:

- 40 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 57 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1697:

ACTGTGTAGA AGATGCTATT ATTGTAAAAC ATAGTTTAA TTTTATTTTC TGATATA 57

(2) INFORMATION FOR SEQ ID NO: 1698:

- 50 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 109 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear
- 55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1698:

AAAATTTTCC CCCGGGAACC CGGTTTTTTA AACCCCCCGT TTTAAAAAAA TTTTGGGGGG 60
 5 CCCAAAATTT CCCAAAAAAA NAAAAAATTT TTTTTTTCCC GGGGAAAAA 109

(2) INFORMATION FOR SEQ ID NO: 1699:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 100 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1699:

GTGTTAACGT GGATTATATC AAGGAGGCGG TCAGGTACAG TCCACACGCA CAGCGCACAG 60
 20 AAGTATCACA TCCAGTAAAC AAGGCTAGTA CAGCATTCGA 100

(2) INFORMATION FOR SEQ ID NO: 1700:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 129 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1700:

AAGGTAAAT GAATTAGGTT GATCAATGCT CTATACTCAT TGCTAAGTCA ACGCACCTTT 60
 35 ACCACCTTTT CCAACTCAG TAAGGCATTC GACGTATTC TTAGCCAAGn TTACATATCT 120
 ACTCTGCAC 129

(2) INFORMATION FOR SEQ ID NO: 1701:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 63 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1701:

CAAGAGGAAC AACTCGGTAC TGCGCATCAG CAGAGATGGC GAAATCACAC TTAGAAGACA 60
 AGG 63

(2) INFORMATION FOR SEQ ID NO: 1702:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1702:

10 TATTTAATAA ATCTTCAATA CTTGTTCAT CAGTTTGTG ATAAATAAGA CCTCTCCATT 60
 TTAAATCTTC AATTAATACA TTCGTCATTA TTATTTCTC CTATTTATAA TTATTTATTG 120
 AATACTTGTT AAAATACTTT AAAGkTTTTT GAACGTAAAA AAAACCCTTA CAACAAATAT 180
 15 GTAAGGGCGC GATTGCACGT TACCACCAAA CTAAACATA ATCATAAGAT AATGTTCACT 240
 CTATTAATGA TACGTTTATT AATAAACGTA GGACATGTTA GTTATAAAGG TGTATTCTA 300
 20 TTATTAAAAA CACTAGTTCA CAGCGACCAC TAGCTCTCTG ATGATTTCAA ATAATATTAC 360
 TTGTCCTTTT ATCCTATTCT GTATGCATTT TCCCTAATTA 400

(2) INFORMATION FOR SEQ ID NO: 1703:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 208 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1703:

35 TCAATATTGA TATCGAAACG CTTTGCAGAT TGATATAAAT TATCAGAATC AAGTAATTCA 60
 TTTATTTTCT TTGGTGAAAG TACTTGGAAG ATACTATACT GATGAAAAC TAAAAATGAA 120
 ATGAAGTATG GAAGTTGTTG CTTTGGGTAA GCAAAATTC TAATACATAC TGATTAAACT 180
 40 GTTTGTTTAT TGAATTGC AACGCATC 208

(2) INFORMATION FOR SEQ ID NO: 1704:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 67 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1704:

55 AAGCCGATGT AATTATTTAT GCAACACCTG TTCTAATGCA CAAAGAAATA TCTTAGCGAG 60
 CTTATAG 67

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1705:

CCAAGTTGCA TGTTATTTTA AGCTGACTTT CCACCAACTT CTGAGTTTGT GGCC

54

(2) INFORMATION FOR SEQ ID NO: 1706:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 61 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1706:

CAACTACACG AAAGGGTAGT GCTTCAAGAT AATAACGTCC AATTATTAGG AACTGTGGCG

60

A

61

(2) INFORMATION FOR SEQ ID NO: 1707:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1707:

ACCATTCCAA ATGAACCTAA ACCACTTGAT ACGTTGACGA CAACAGGTTG TTCA

54

(2) INFORMATION FOR SEQ ID NO: 1708:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 59 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1708:

AAATTTGAAT AACTGTACAC ATTTTGTGA TCATAGTCTA TATACTTTGT GAATTAATT

59

(2) INFORMATION FOR SEQ ID NO: 1709:

- (A) LENGTH: 59 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1709:

10 GCACAATAGC CAATTAGATG GGGCCGGTGC GGTAACATTT TGCTTCATTC CTGCATTAT 59

(2) INFORMATION FOR SEQ ID NO: 1710:

(i) SEQUENCE CHARACTERISTICS:

15

- (A) LENGTH: 55 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1710:

TTACAATTCA ATCAAGTTCT TCATTATCAG ACGAAGAAAT CCACCGTATG GTAAA 55

25 (2) INFORMATION FOR SEQ ID NO: 1711:

(i) SEQUENCE CHARACTERISTICS:

30

- (A) LENGTH: 56 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1711:

35

TTTCTGCTTA TTGTCATTCG ATATCGAATT ATTAGAAAGT GCAGATTTCG CATCAG 56

(2) INFORMATION FOR SEQ ID NO: 1712:

(i) SEQUENCE CHARACTERISTICS:

40

- (A) LENGTH: 55 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1712:

TAAACCTTTA GGATTGCTGG CAATAGTAGT GCAGTTGGCT GGACTTGTCA TGCCC 55

50

(2) INFORMATION FOR SEQ ID NO: 1713:

(i) SEQUENCE CHARACTERISTICS:

55

- (A) LENGTH: 207 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1713:

5 CAAGAGGATT CGTGCANTGA ATTCATGGAG ATATTTAGAT CTTTCACTGG AGAGAAAATA 60
 AAAAGAAGAA AAGAGTAACC TTTAGATTGC TGGATnTGTG CAGTGGCTGC TTGCGTGCCT 120
 TTAGGTGGCA TAAGGAGGCT ATACGCAGAC AACCACCGTC CCGGGGTTTT ATTGTACACT 180
 10 GTGTAGGACG CAGACTTTAT GTGGTTG 207

(2) INFORMATION FOR SEQ ID NO: 1714:

(i) SEQUENCE CHARACTERISTICS:

15 (A) LENGTH: 84 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1714:

TGGTTATCGA CTGCTCGTAT ATTTTGACTG TTTTGACTGT TGTTCCGTA GCAATACTAT 60
 25 CTCCTAAGCC TTTTATTGGC ATTG 84

(2) INFORMATION FOR SEQ ID NO: 1715:

(i) SEQUENCE CHARACTERISTICS:

30 (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1715:

GTTTGAATTG ACTGACTTCG TTTTACCGCG TGTTAATAT TGTTATACAT ATAT 54

(2) INFORMATION FOR SEQ ID NO: 1716:

(i) SEQUENCE CHARACTERISTICS:

40 (A) LENGTH: 77 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1716:

50 GAAGCCTGTC AGTGGATCAA ATTATTGAAG ATAACCTGGG TGGCATTTTT GGAAAGTCCA 60
 AATGCTGGGA ATGGTCA 77

55

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 154 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1717:

GGGCCCTTTT TTTCCCAAAA AAAAAAACCC CCCCAACCCC AATTTTGGnC CCCCTTCCCC 60
 TTTAAAAATT TAAAAATTGG GCCAAAAGGC CCCCCCAAAA AAAACCCCCA ATTGGAATTG 120
 GAAACCAATT GGAACCAATT CCATTGAACC AGGA 154

(2) INFORMATION FOR SEQ ID NO: 1718:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 120 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1718:

ATTGTCTACA CTGCCACTTT ATTTTCATTA ACCATTTCAC AAATGTGTTC ATCATTCAAC 60
 ATGAACATCA ATTGTTCAAT TACATCGACA CCTGATGCCT AAnCACGCAC CTTTTCGACA 120

(2) INFORMATION FOR SEQ ID NO: 1719:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1719:

TTCATTTGTT TGTAAGAGTG GCATTTCTAT GTCTTAAAG TGACGAACT TCAC 54

(2) INFORMATION FOR SEQ ID NO: 1720:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 55 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1720:

(2) INFORMATION FOR SEQ ID NO: 1721:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 71 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1721:

TTTGGATTAT AAATTGACAT GTAAGTACGA GGCAGCTGTA CCGATATAT AATTGCTAAG 60
 AGTTAGGGCT G 71

(2) INFORMATION FOR SEQ ID NO: 1722:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1722:

TTTTATCTTT ATTACTAAAA CCAACTGCAC CAAAGTTTGC AGTCATTACC ACACGTTTAA 60
 CACCCGCATG TTCTGCAGCT CTTAAAATAC GTTGATATACC TTCAATTGCA GGCTTCGCCA 120
 TCACTTCTGC ATCGTCTGTT TTACCGAAAA ACACCGGAGA TGCTACACTC AAGACATACT 180
 TGCAATCTTT CATTGCTTCA TCCCAATGTh CATCTGTGA TAAATCCGCT TCGACAAACA 240
 TTAAATCGCT CTGTGGAAAT GCCCATGTCT TGCATTGTTT nAATTACTTT ATCAGCTTTA 300
 CTTAAATCAA GnATCGTCGT TTGTA 325

(2) INFORMATION FOR SEQ ID NO: 1723:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 71 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1723:

CAGTATTGCA GTCACGACAA TGTGATGACT AAATTATCCA AAGTATGAAT TCCATGCGGC 60
 ATTAATCCTA G 71

(2) INFORMATION FOR SEQ ID NO: 1724:

(A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1724:

TTGCAACGAT ATTAGGCTAT CTAGTCGGCA TATTTGTAAA ACAAGATCCA ATT

53

(2) INFORMATION FOR SEQ ID NO: 1725:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 71 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1725:

ATCTATTCAT CTTCTACAC GGACAGGAAA TGAGTCCAGT AGATGCACAT TGGGAATTAA

60

TCGAAGCTAG C

71

(2) INFORMATION FOR SEQ ID NO: 1726:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 71 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1726:

CATCTTGACG GTCTACATTA TAAATGTGA AGTTTTCTAC GATAACAATT GGGAAACTCA

60

GGGGCATCTC C

71

(2) INFORMATION FOR SEQ ID NO: 1727:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 235 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1727:

TTCTTTTTTA AAAATTC CCC ATTCTTTTTT AAATTTCTTT CCCGCTGGAT TAAATGGATT

60

TTAAAAATTC CACCCCAACT TAAATTTAAA TGGCTTGTGG AAAATTAACG GGATTGGCAT

120

TCCAGCTTAA ATGGTTTTTT TGGAGGCTTC CACGTTAAAA ATGGCGGGTG GCTTT

235

(2) INFORMATION FOR SEQ ID NO: 1728:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 61 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1728:

TAGAGTGGCT ATAAAGCTAA GTTCAATTGA CCAATTTACA ACAGGTTATT GAGGACAATA

60

A

61

(2) INFORMATION FOR SEQ ID NO: 1729:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 54 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1729:

ATCACCAAGA AGTTCTAATG CTTGGTATAA ACGTTGAATA CGACGTTTCGG TATT

54

(2) INFORMATION FOR SEQ ID NO: 1730:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 59 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1730:

CGTCCCGAAG CGTTGGAGGC GGGAAACATCC AGAGTAATTG GCACAGATTA TGACCATAT

59

(2) INFORMATION FOR SEQ ID NO: 1731:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 60 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1731:

(2) INFORMATION FOR SEQ ID NO: 1732:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 105 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1732:

TATGTGGTGT TCAATGCACT GGTCAATTATG GTGCATCTTA CCAGATTCGG CATTCTTATT 60
ATAACTATAC TTGTAATAAA TGGCGACATG CAGACACGnC AATAC 105

(2) INFORMATION FOR SEQ ID NO: 1733:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1733:

TTTACGTTCC ATAGCAAAGT GATACAAACG TCAGCATCAA TGTAAGGCAT AGATCATAGT 60

(2) INFORMATION FOR SEQ ID NO: 1734:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 56 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1734:

TTCCATCATA CATTGCGGTT TTACTTTTCT TCTGGTATGA TCAAATATTC ACATAA 56

(2) INFORMATION FOR SEQ ID NO: 1735:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 57 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1735:

AAATGGGGAT GAAACAGTTA GTGTACAGGT GAAAGCTTAA CAGCAGCTAC AATTGCA 57

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 61 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1736:

GATTTGCAAT TAAACTTAAA TGTAATTTTT CGGAATGTGT ATTTGGTTTA CTAAAGTAA
 A

(2) INFORMATION FOR SEQ ID NO: 1737:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 57 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1737:

AAAGAAGCTA AAGAAAAAGT TGATAAAACA GCAAAAGTGA TTATTAGCTA CAGCATT

(2) INFORMATION FOR SEQ ID NO: 1738:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1738:

CAATAATATC GCTAAAACCG CCATTTGTAC CAAATGAATT TGATAATGCT GCAG

(2) INFORMATION FOR SEQ ID NO: 1739:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 59 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1739:

TAGAGCCCAA CCGGCAACCC ATCCATGGAA ATTCACCAAA ATAATACATT GACCCCAAG

(2) INFORMATION FOR SEQ ID NO: 1740:

- (A) LENGTH: 136 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1740:

10 CCTTTTGGn AATTTAAGGG GGTTCCCAAC CAAATTC CCC CAAATTTTTT TGGGTAA AAA 60
 AAACCCGGCC CAAAAATT TA AGGGAATTG GAAAAAGGT TGGTCCCTT TTTTCCCAA 120
 GGCCCAAAAT TTGGAA 136

15

(2) INFORMATION FOR SEQ ID NO: 1741:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1741:

25

CATTCAACCA ACGACTGACA ACAGAACATT TAAGAGTCTA GGACATTGAT TGA 53

(2) INFORMATION FOR SEQ ID NO: 1742:

30

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 52 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1742:

40

GCTCGTCTGA TTCAGTCACA AAATTGTCTT GTTATACTTG TCACCTATCA TC 52

(2) INFORMATION FOR SEQ ID NO: 1743:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1743:

50

TGTTATTTAA AGAGGCTCAA GCTTTCATAG AAAACATGTA TAGAGAGTGT CAT 53

(2) INFORMATION FOR SEQ ID NO: 1744:

55

- (A) LENGTH: 94 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1744:

10 TCTGAGTTAA AGACGTCTCA CTAAAGCTT TAGCAATTC AACATCAGA TATCTTCACA 60
CGTGTTATAT GTGTCCATTA ATATATCCTG TGGC 94

(2) INFORMATION FOR SEQ ID NO: 1745:

15

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 212 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1745:

25 GGAAAAAAnn TTTTAAAAA AAGGGAAAAG GGAATTGGGG TTCCCGGCC CTTTTTAAAG 60
CCCCCAAATT AAGGAAATTT TAAATTTTGG GGAAGGGGAT TTCCACCGG TTAATAAACC 120
GCCGATTTTG AGGGGGTTGA ATTAATTGGC CCAAATTTAA AACCTGGAT GCTGGGTCCA 180
30 ATTTTTTACC GGGACCAATT GGTCTGTCAT GA 212

(2) INFORMATION FOR SEQ ID NO: 1746:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 58 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

35

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1746:

TATCTTCCGA TGAAGAACAA GATGCACAAG AAGTACGCCA ATGATTTAAG AAAGTGGT 58

45 (2) INFORMATION FOR SEQ ID NO: 1747:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 105 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1747:

55

AAAATTAAGn CCTTTTTTAA CCTTCCCTT CCCCAATTGG GGCCT

105

(2) INFORMATION FOR SEQ ID NO: 1748:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 52 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1748:

AGTGCCTATT ACTTTGATTG ATGTCCAAGT TTCCTATCAC ACAACTTAAT TT

52

(2) INFORMATION FOR SEQ ID NO: 1749:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 95 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1749:

AAAGCATCAT CCGAACTCCA ATGATTATAC TCCCTAGATA TTATTATGTG ATGCTTTGAG

60

CATTAAATTAG AGATGGGACG ATTCCATGAA AGATA

95

(2) INFORMATION FOR SEQ ID NO: 1750:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 63 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1750:

TTGACACATC TACTCACATT AAAAGTAGAT GAAGCGTTGA GATTAAACATT TCCACATTTA

60

CAA

63

(2) INFORMATION FOR SEQ ID NO: 1751:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 116 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

TCGATATTTG AGACACGCTG CTGTAATAAA ACATCCTATA AAGTATATAC CAAGATCTAC 60
CAATATAAAC AGCGGCTATA TGATATAAAT GCTCAGACAC ACCCnCTGCG ATCCAT 116

5 (2) INFORMATION FOR SEQ ID NO: 1752:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 114 base pairs
 (B) TYPE: nucleic acid
10 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1752:

TATGATTAAAG CTTAGTGCAG ATTTGATTTA TThACAACG CTTCACTACA TTAAAAATAG 60
GGCACTCGCA CATATAGTTG TATCAATAGC CTTTATCAAT TTTTGGGAA GGTT 114

20 (2) INFORMATION FOR SEQ ID NO: 1753:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 52 base pairs
25 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1753:

AAC TTCAAAT GTGCCAAGTG TTGAATCACA TCAAAATCAT TTTTATTTAA CG 52

(2) INFORMATION FOR SEQ ID NO: 1754:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 75 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1754:

ACTAATCCCT TGC GTGTTT CAATCAATTG CATTATTAGT GGCCATTGT TTGATATAAC 60
45 TGACAAGCTT TAACC 75

(2) INFORMATION FOR SEQ ID NO: 1755:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1755:

GTGAACAAGG GTAGATGTAA ATAGTTGATG CATGTGTACA CATCATAACA AAA

53

(2) INFORMATION FOR SEQ ID NO: 1756:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 66 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1756:

TTATTTGGGC AGGCAAATAC CCTTAATATA TTCAAATCAT GTTAATATCA TTGCTATTGC

60

TAAACC

66

(2) INFORMATION FOR SEQ ID NO: 1757:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 57 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1757:

ATTAATCGGA GCACTTGGGT TCGCAATTTA TGCTGAAATG GATCATTCTA CATCATC

57

(2) INFORMATION FOR SEQ ID NO: 1758:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1758:

CGAACAATAA CTCTAAGTAT CCAACAAATG CTGCAAGTGT ACCTACTGTG ATTGATCCAG

60

AAATAGCAAG ATATGCACCA ACACCGATGA CAATAATTGG TCCAATATCT GTAACGTAT

120

TAATTGCGGC AAAGGAATAg GCATTCCATC TTGTATGTTT CAACGCACGT GTTAGGAAAT

180

TAGTATTCTT TTTATCAAAG TTTTTCGCTT CATGTCTTTC AATCGCAAAA CTTTTAACGA

240

CTGAAATACC TTGAACACGT TCATGCAAGA ATCCTTGAAC CTCAGCTAAT GCTTGAGATC

300

TTTCaNGTGT CAATTTTCTT AATCTTCCAA AGAAAACGTA CACCGTTAAA ATGTAAAATG

360

(2) INFORMATION FOR SEQ ID NO: 1759:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 139 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1759:

ATTATGTCA TGCTAGGTCA CTTGCATCAT CCATTTAGTA TAGAAGACGA CAAAATTAAA 60
 TTATAGTGGG CTCCTTGATT GGCAGTATTC ATTTTCGGGA AGCGGGGTCC AGGCTTAAAG 120
 GGTATTAGAC GTGTTACC 139

(2) INFORMATION FOR SEQ ID NO: 1760:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1760:

TCGCCCCCTCC AGGCTATTAT TTCATCTATA TCATTGTCAT CAGTTAAATT CAGCCTCGAC 60
 ATTTCCATTT CAATAGACTG TTCATTCAAT TCTAAGTCAT TATTGTAAGT TTCTAGTTGA 120
 TTTTCATAAT GATTTAGATT ATTTTGCTCA ATTAACTTTC TTTGAGACAA TTGCATTAAC 180
 TTATCTTCAA TCTCCTTTGA GAGTTCTTGA TGCTGATTCA CATCTTGAAC ATACTTCTTA 240
 TAATCCACCT CAAAATTAGT GATATTANTA TATnTCGAGA GTGTTTCAAA TTCAGTGATG 300
 AGATCTCGAC ATAAT 315

(2) INFORMATION FOR SEQ ID NO: 1761:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1761:

TAAATCCTCG AGATTCTTAA TAGGGTAGAT ATCTAACGTT TCGCAAAGC TCTTTTGGAT 60
 TTGTTCTTCT TTTGAATCTC CAATGATCTT ATTATCACCA TCACAAGATG TAACAAAGAT 120

CCATCCTCAT CATTTCATCAT CTTCATCTAC CTTCGCGGCT GGAAATTCAA aGAatCTATT 240
 ACTGACAAAT CGCTTTTTTCC ACCTTTTGAA AAGTCAATTT CCAACTTTTT ATAACCCACA 300
 5 GAACTTCCTT TCAAATTACC ATCAATATGC ATTTTAAATA CCGGTGCTTT ATCAGTAGGA 360
 ATATTATAAC GACTTCTTAA TTGCTTAACA TTTTCATCT 399

(2) INFORMATION FOR SEQ ID NO: 1762:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 224 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1762:

20 GTATAGAAGA CGACAAAATT AAATATAGTG GCTCCTTATT GCAGTATTCA TTTTCGGAAG 60
 CGGGTCAAGC TAAAGGTAT AGACGTGTAC AATTAATGAT GGCATTATTA ACGATGTATT 120
 TATTCCTCTT AAGCCACTTA GACAATTGGn AATTATCTCA GCGGAATATA ATGATGTTAT 180
 25 TAATGAAAAA GTTCATGTGA AAAATAAAGA TAATTATnTA CATT 224

(2) INFORMATION FOR SEQ ID NO: 1763:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1763:

AGCAACCAAC GCCAGATAAA GCAGAAGATA ACGCATTTCC CCCCATCACC ATAT 54

(2) INFORMATION FOR SEQ ID NO: 1764:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 59 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1764:

50 ATTCCCTTAT CGCATTCTGT AAAATGATCT TCATCAGAAA TTGCTTCGAT ACGTTTATG 59

(2) INFORMATION FOR SEQ ID NO: 1765:

- (A) LENGTH: 54 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1765:

10 GATTCAATTC ATCTGTATAG ACGATATATC CTGATATGAA TTGGAAATGG AATA

54

(2) INFORMATION FOR SEQ ID NO: 1766:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 85 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

15

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1766:

ATCGCATAGA AGCATTAGAC TCAAATATT TTCGGTTATG AGAATAACTC TGACATCCAT

60

25 ATGGATACTT AGTTTCCAAG TTAGA

85

(2) INFORMATION FOR SEQ ID NO: 1767:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 54 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

30

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1767:

CAGTACTGCT GAATGATGCT ATTGATTTTC TCATGAGACA TGGCGATAAC ATCG

54

(2) INFORMATION FOR SEQ ID NO: 1768:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 116 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

40

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1768:

50 GnCACTACTA ATCGTATCAG GATCACTAAT TAAGGCATCC AGCATCAGAT ACGAGCGCAC

60

GTCAGACTAA TCTACTGTCA TGATAAAGCA GCTGCTAACC TTGTAAGTTC GTGAAA

116

(2) INFORMATION FOR SEQ ID NO: 1769:

55

- (A) LENGTH: 82 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1769:

10 GTTCTATCCA ATATGGAAAT GAGGACATTA TCGTGAAAG CTATGGACGA TGGACGATGG 60
 TACACGCATG TTGTGTAAGC AG 82

(2) INFORMATION FOR SEQ ID NO: 1770:

15

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 152 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1770:

25 TATCTGTATT GTAGTAATCC GCTTCTCCCA TCTATATAGG GATCTTTCGT AGATATTCAC 60
 TTTATGCCTA GGATCCAAGA TGTGTAAGCA GCACTTTGCA TTATCTAATG CAAAGGGnAC 120
 ATGCGGCTGT AAGCCCTGTT CTGATAATCA TA 152

30 (2) INFORMATION FOR SEQ ID NO: 1771:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 51 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1771:

40 TGGAGGCGAA GTAAATGAAA AGTATTACGT TTGAAGAACA TTATGTCATT G 51

(2) INFORMATION FOR SEQ ID NO: 1772:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 232 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1772:

55 nGAAACAAAT ATCTGATGAG ATATGCAATG ATGACTATAA GTAACATTAA AATGAAGCCC 60

CGTACACCAA TTATATCTTT GTGGnTGTTA TATTAAATCT ATATTATGTT CAITTAACAG 180

CATATGTTAA AAATTGACAG TTAACACATG TAGCTATTTG ATGTGAATGT GC 232

(2) INFORMATION FOR SEQ ID NO: 1773:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 108 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1773:

TAATGTCCCC CAGAAATGTAG GCAAATGCAG AACCTGGTTT TAGGGTCAAC TGTTTnTTCT 60

CCAAGCAGAA ACAAAGTTCT TGTGTCAGTG CACTTTTGGT CCACCATT 108

(2) INFORMATION FOR SEQ ID NO: 1774:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1774:

CGCAATTGAA GGATACACTA TTTTAAGAGC TGCAAACATG CGGGTGTAAC GTGTGGTATA 60

CTGCAACTTT GGTnATTGGT TTAGTATAAG ATAAAATCAT CACAATGAAT C 111

(2) INFORMATION FOR SEQ ID NO: 1775:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 73 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1775:

CAGGTTATCA GCTAATAGAT ATGTTGAAGA GGCAGTTGCA GGCCAAATGA AACTGCAGAT 60

GTAGTTCAGT ACC 73

(2) INFORMATION FOR SEQ ID NO: 1776:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 67 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1776:

5 TAGACACAGT GCAAAATCTG GTACAGCTTA TGGGAATTAGA CGGGTAAAGC AAATTACTGA 60
GTACCCA 67

(2) INFORMATION FOR SEQ ID NO: 1777:

10 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 127 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1777:

GTATGCCAGT GTCATTGCTG AAAACATCAA CCATTCCCTG CACCAAAATT TTTGGTAGA 60
20 GTTTGATGCT GGCCATCCTC CAAGGGACTA AGGGTAATTT TGnTTAAAAA GAGCCAAAGG 120
CCCAATG 127

(2) INFORMATION FOR SEQ ID NO: 1778:

25 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 236 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1778:

35 GAACCCAAAA ATTAGCAACA GTGGCTACAA TAGTTGGGCA CTGAAAGCCA GCCAAGTGGG 60
ATTTTtagcc CTGATTTGA AAGCGGGGTC CCCAGGATTA AAAAATTTAA ATTAGCCTAA 120
TAAGCCCCAAA ATTCCCATTT GGAAAAGGAA ACCTCCTTAA ATTGGGTTGG AAAAAAGnTT 180
40 AAAAAAAAAA AGGCCcAGnC CTTGGAATTT TTTGGAATTG GAAAAAGGAA TTAAAA 236

(2) INFORMATION FOR SEQ ID NO: 1779:

45 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 50 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1779:

(2) INFORMATION FOR SEQ ID NO: 1780:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1780:

GACGACTCGC TTCTATTTTA AAATCCGGCG TACTTgGTTA TATAAATATC ATAATGGTTA 60
 AAATTAAAAA GCAATGTCAG TTCACACTAT TACTGACATT CTTTtagTTA TGTGTATATT 120
 ATTCATTAC AAGCTTTTGG TCTATAAATC GAGTGATTG CTTTGTTTGT ATATAACCAT 180
 CTGCTACATA TTCATCGTTC ATTGTAATTA ATGGATAAAA TAGTTCATCh n 231

(2) INFORMATION FOR SEQ ID NO: 1781:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 209 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1781:

GTCTCCCTGC CCCACATTTA ACATTGTAAT TTTGTGATGT GAATTTGTTG GAAACGTTAT 60
 TAATAATGTC AGAATAATTA TAGTCCAAAA CGTAACCAAT ATATATTTAC GTTTAGCCAA 120
 TAACCAAAAT ATGTAATAAA CAGAAATTAT AAATACTATA AATATCCAAT CATTAAACTT 180
 GGGAACAGAA AAATGTGATT GCTTGATTC 209

(2) INFORMATION FOR SEQ ID NO: 1782:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1782:

GTTAAACTTA GTTAGATAAA ATGCAAATCA CATTATTGTA GATAGTCTCT TTTC 54

(2) INFORMATION FOR SEQ ID NO: 1783:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1783:

TCTGGAATGT CTCCTGTCT CTCTATATAG CTATAGTCCG TCGCAAGCGG ACGTAATGTT 60

10 CATTTTCATA ATGATTATAG TATGAAAGCG CTTTCTTGTA TATGTGACAT GTGCGTGThG 120

(2) INFORMATION FOR SEQ ID NO: 1784:

(i) SEQUENCE CHARACTERISTICS:

15 (A) LENGTH: 57 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1784:

CTACCATTTA CATAAGACC GTCTAATTCT TCAGTTTCAA TGGCATTTTG GAGCAAT 57

(2) INFORMATION FOR SEQ ID NO: 1785:

25

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 54 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1785:

35 TCATAACCAT TACCAAGTAT CCAAGCAGCT TTAAACAAT ATGGCATAAA CATT 54

(2) INFORMATION FOR SEQ ID NO: 1786:

(i) SEQUENCE CHARACTERISTICS:

40 (A) LENGTH: 84 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1786:

GGATGGGTGA TTTTAGCAGG TTTGGCTATG AGTACCGTAT TTGCATTAGG ACCGATTICA 60

50 TTAAACAAAA TCATAATTTT GGGC 84

(2) INFORMATION FOR SEQ ID NO: 1787:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 134 base pairs
55

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1787:

CCGGTTTACC CTTAAAATTA TTTTGGGG GGTCCATTA AACCTTCCA TTCCAATTA 60
10 ACCCCnACCC CCTGGGTTT TCCTAAAAA CCAAAGGCC CTTTTTTTC CCAACCCAAC 120
CTTGGGGGAA TTGG 134

(2) INFORMATION FOR SEQ ID NO: 1788:

15

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 70 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1788:

TATATCAACT AAAAAGCGCA TCTGCAACCG ACGGTTGAAA ATTTGGACAG GAGACAGATA 60
25 ATGTAATATA 70

(2) INFORMATION FOR SEQ ID NO: 1789:

30

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 50 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1789:

AATATCCAAT TATACAAGCA GGTATGGCAG GAAGTACGAC ACCGAAATTA 50

40

(2) INFORMATION FOR SEQ ID NO: 1790:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 50 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1790:

TGATTTACTA GCTGAATCCG ACATGCTTGA TGATACACTA TGTGAATTCA 50

(2) INFORMATION FOR SEQ ID NO: 1791:

55

- (A) LENGTH: 58 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1791:

10 CCGGACGCTT TACTTCCAAC TTTAGGTGGT CAACACAGGT TTAAACATGG CGATGTCA 58

(2) INFORMATION FOR SEQ ID NO: 1792:

(i) SEQUENCE CHARACTERISTICS:

15

- (A) LENGTH: 58 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1792:

CATCATCCTC TAATTAGTC CAAACTCCTG GATGATATCC AAATGAAGTT CCAATTGA 58

(2) INFORMATION FOR SEQ ID NO: 1793:

25

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 62 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1793:

35 CACAAGTTTT AGAAGGAAAC CAATAACAAA TGACGAGATT AATTGCCACA AACATTAACG 60

AC 62

(2) INFORMATION FOR SEQ ID NO: 1794:

40

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 103 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1794:

50 AAGGCCCGGG GGGTTTAAAA AAAAAGGTTT AAAAAGGnT TTGGCCCTTT AAACCCAAAG 60

GGAAATTTTA ACCCCAAAAA AAAAAACCC CTTTGGGAAA GGG 103

(2) INFORMATION FOR SEQ ID NO: 1795:

55

- (A) LENGTH: 121 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1795:

10 TATCGATCGA TCATGTCGAA TCGATCTGTC GATCGATCGT ATCGATCGAA TCGCGTCGAA 60
 TCGAATnCGT CGAATCGATG CTATCGATCG AATGCTATCT GAGTCGAATC ACGTCGATCT 120
 G 121

15 (2) INFORMATION FOR SEQ ID NO: 1796:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 62 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1796:

25 AATTCATGTT AAAATCCTCC TGATATTAGA TGGCCCATTT TTATTTTTTT CGTTTCCATA 60
 TA 62

30 (2) INFORMATION FOR SEQ ID NO: 1797:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 397 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1797:

40 CATACTCGAC AATTAGATG GTGAaTACTT ATCATTTAAG TCCTTTGaCA CCTCATCTAA 60
 AATTCTAGGA CTTTAAACAA TTTCTTTATA CGTATTTACA AGTTGAATAT TACTTTGAAC 120
 CTCTTGCGCC ATAAACTGAG GATTGTCACC CTTAGTTTGA TTCACTAAAA TTTGAGTATT 180
 45 AGCTTGATAT TTAGGTGATA AGACGAAAAA TGTAACAATA GCGCTAATAA TTAAAAATAA 240
 TAGCGGTAAA ATAATTAAAA TCTTCAAGTT TTTTGTAAAT ACTTCTTTAA TTTTGTAA 300
 TTCTAATGTA CTTTCCATTA TTTACCTCCC TTAAAAATT TCATTAAAT TGGTATTATA 360
 50 TATATAGTAT TTACATATTA CATATCGTTT AAACAAT 397

(2) INFORMATION FOR SEQ ID NO: 1798:

55

- (A) LENGTH: 66 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1798:

10 CGGGTAACAG CGAATGGTGT GTCACCGTAT ATAACCTTAC TATTTAATAT TTGGCCTGTT 60
GCTTTC 66

(2) INFORMATION FOR SEQ ID NO: 1799:

15

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 77 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1799:

25 GTTGCTAAGT TTGTATTACA ATTTAAATGA TTTTGTAGCTT GAGTAAGTTT ATTTAAAGAT 60
GCAGTAATTT CGCTAGG 77

(2) INFORMATION FOR SEQ ID NO: 1800:

30

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 172 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1800:

40 TAATGCTATT TAATTTTCTA CTTCTAAGC TTCCACCCAT AACGAGTAAn ACTTTTTTAT 60
TTTCATTAAA GCCTGTTAAT TGATAACCAT TATGTGCATT ACCATTTTTT AAATCTTCTC 120
GAATTGTTGC TCCAATAAAA TCAGCTTTCT CTTTAGGTAA GTAGTTTAGC GT 172

45

(2) INFORMATION FOR SEQ ID NO: 1801:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 140 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1801:

55

AGTAAATTT GTCATCACGA TCAGCAAAG CTTTGATTG TGACGTATCT TCCATAAATG 120

ATCTAAAAAT TGGTAGTTTCG 140

(2) INFORMATION FOR SEQ ID NO: 1802:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1802:

ATCCCCCGTA CAGACTTCAG CTTACGTAAA CATGCTGAAC ACTCTAGTGA AGATTTCAAA 60

(2) INFORMATION FOR SEQ ID NO: 1803:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1803:

CAATTTAAAT GCATCTTTCC CATTAAATTC ATTTGTTGTC GCTTTAGCTG TGTTAATTAA 60

(2) INFORMATION FOR SEQ ID NO: 1804:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1804:

ACTTGATCGA AAAGGTTTCA TACCGGTAAA CGATAAAGTT GAAACAAATG 50

(2) INFORMATION FOR SEQ ID NO: 1805:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 53 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1805:

(2) INFORMATION FOR SEQ ID NO: 1806:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 70 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1806:

AAGAACTGTC TATGAATATT GGATGACGCT TTGATGAGAA CATTAGTAAG CCATTGTTC 60
 AAGGAGTACA 70

(2) INFORMATION FOR SEQ ID NO: 1807:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 77 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1807:

TAGCATTCT AATGGAATCC AATCTTACCG AATGACAATT GGAATATAAC TGGTGATAAT 60
 GTTGAATGGT CCTGTGA 77

(2) INFORMATION FOR SEQ ID NO: 1808:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 121 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1808:

CCCGGCCCAA AACCCCTTTT TTGGGTAAAA AATTTTTTTT AAAAAGGGAA AAATTTCCCC 60
 TTTTTTGGTT CCCAAATTTT AAATTAGAAA GGGCCCCCCC TTCCCCCCCCA AATnTTTCCC 120
 A 121

(2) INFORMATION FOR SEQ ID NO: 1809:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1809:

AAGTTTGGTG AAGGAACCAC GTGCATGATG GTGTTCAAAC AATGCGTTAC GATGTTGACG

60

(2) INFORMATION FOR SEQ ID NO: 1810:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 58 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1810:

TGGTTGAGAA AACACAGCGT TAAAGTTGAG GTATTTCAAAGACAAGTTG GAACATTA

58

(2) INFORMATION FOR SEQ ID NO: 1811:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 55 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1811:

CTTAAATAGC AAGTGGTTTT ATAACAAC TTGAGTTATCT CAATATAGTT ATCGC

55

(2) INFORMATION FOR SEQ ID NO: 1812:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 50 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1812:

TAAGTCTTCA ATTTTTTCAG TTGATACACC TAAGTGATAC AGCCATTCTT

50

(2) INFORMATION FOR SEQ ID NO: 1813:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 50 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1813:

(2) INFORMATION FOR SEQ ID NO: 1814:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1002 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1814:

```

TGGTCATGCG GGAAATACTA GGACATGAAA ATTATGCTAA AGGCATCAAA GTAAC TGAAA      60
ATAATGGCGT AGTGGATATA GATATGTACA TTATTGTAAG TTACGGTGTG AAAATATCTG      120
AAGTTGCCAA TAATGTACAA TCAACAGTGA AATATACTTT GGAAAAATCA CTTAATGTAT      180
CAGTAAATTC AATCAATATA TATGTACAAG GTGTACGTGT GAATAATACA GGCAAGAAAG      240
CTTAGGAGGA CAACTTGAAA TGATTAGCAA AATTAATGGT AAATTATTTG CCGATATGAT      300
TATACAAGGG GCACAAAATT TATCTAACAA TGCAGATTTG GTAGATTCTT TGaATGtGtA      360
TCCAGTGCCA GATGGtGATA CAGGAACAAA TATGAATCTT ACTATGACTT CAGGTCGCGA      420
AGAAGTAGAG AATAATTTGT CGAAAAATAT CGGCGAATTA GGTA AACAT TCTCGAAAGG      480
TTTACTAATG GGTGCAAGAG GTAACnCTGG TGTCATCTTG nCACAATTAT TCAGAGGATT      540
TTGTAAAAAT ATTGAAAGTG AATCTGAAAT TAATTCAAAA TTGTTAGCTG AAAGTTThCA      600
AGCTGGTGTt GAAACGGCAT ATAAAGCTGT TATGAAACCA GTTGAAGGTA CAATACTTAC      660
AGTTGCAAAA GATGCTGCGC AAGCTGCAAT AGAAAAAGCA AATAATACTG AAGATTGTAT      720
AGAATTAATG GAGTACATTA TTGTAAAAGC CAATGAATCA CTTGAAAACA CACCAAACTT      780
ATTAGCTGTA CTTAAAGAAG TTGGTGTtGT TGATAGTGGC GGTAAGGTT TGTtATGCGT      840
TTACGAAGGA TTCTTAnAAG CGCTTAAAGG TGAnAAAGTT GAAGCCAAAG TTGCAAAGAT      900
AGATAAAGAT GAATTTGTAC ATGATGAACA TGATTTCCAT GGTGTAATTA ATACTGAAGA      960
TATTAATTTA TGGCTATnGT ACTGAGATGA TGTTTCGTTT TG                               1002

```

(2) INFORMATION FOR SEQ ID NO: 1815:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1815:

GACAACGCTA TTATTTTITAG TTTTTCaATT CTATTATGTC ATAATTATGT CACTCAAAAA 120
 CTGTTTTCCA ACATTGATTT ATTGTTGGAA AATCTCGAAA ATCTAGTCTA TTTCTCCAAC 180
 5 AATCGAAGAr TTATGCCCTT TTTTCTCCCT TTaAATAAGT CATAATACGA GGCATACATG 240
 CAACATTTAC AATAAAATAT GTTCCTACAT CGTATTATAC GAATGCTCAC ACTTATAGTT 300
 10 GTTTAGTAAA CCCAGATGTA TTGCTAACAT ACCCATHAnC nCTATATAGT T 351

(2) INFORMATION FOR SEQ ID NO: 1816:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 62 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1816:

ATATCGTATC CCATGCGGGA AGGGCTTTAT TTATACTGTG CACGATGAAT GCGCACAACG 60
 25 GG 62

(2) INFORMATION FOR SEQ ID NO: 1817:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 70 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1817:

AAAGGGGGGA AATTTTTTTT TTTTGGGTTT GGGGGGAAAA TTTTTTTTGG GTTTGGGAAA 60
 40 TTAAATTAA 70

(2) INFORMATION FOR SEQ ID NO: 1818:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 51 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1818:

CAAGTTCGGA ATGCGAACGC GTCTTAATCT ATATACAAGT GATGCACTCC A 51

(2) INFORMATION FOR SEQ ID NO: 1819:

- (A) LENGTH: 52 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1819:

10 TCGCCATACT ATCGACAGCT GCTAAAATTG CGCTCTTCTT GTGTCGCAAT CG 52

(2) INFORMATION FOR SEQ ID NO: 1820:

(i) SEQUENCE CHARACTERISTICS:

15

- (A) LENGTH: 58 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1820:

CAAATTGGGG AAATTACTAG AAATGAAGAT ATTTATAAAG ATGACTGGAC GTCAACTT 58

25

(2) INFORMATION FOR SEQ ID NO: 1821:

(i) SEQUENCE CHARACTERISTICS:

30

- (A) LENGTH: 58 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1821:

ACTGCTTCAG CACCTGTATT CATTGGGGAA AGCTTTATCG TTGACCGGCC AGTTTACA 58

(2) INFORMATION FOR SEQ ID NO: 1822:

40

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 190 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1822:

ACCTGTTGCT CGTGTCATAA ATAGGTGACT ATAAATCTCT GTTCAATATA CTTTTGTTTT 60

50

TTCCAATCTT AAAGGTCGAT GTTCGTGAGT AATCTTATCT CTGGnCCAAT TTTAATGTCA 120

TGATATGTTT ATAGTATCAC CCCTTTGTTG TGTAATAATA ATCAGGTGGG TGGTTAGAAC 180

55

GGTGTGAATA 190

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 50 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1823:

AGCnTTAGCn TATGGTTTAG ACACAACnTgn TAAAGATGcn AAGTTCTTGT

(2) INFORMATION FOR SEQ ID NO: 1824:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 102 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1824:

AAAAATTGGA AAAAAGGGGC CCAAAGGTTA ACCCAAATTG GAAAnAAACC CAAATTTTTT

GGAAATTAAC CCAAAAATTG GCCCCCAATT GGAACCCAAA AT

(2) INFORMATION FOR SEQ ID NO: 1825:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 57 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1825:

ACGTACCAAT GTCATAATCA GTCATTTTAC CACTCTTAAT AATCTGCTTC CGGGCAA

(2) INFORMATION FOR SEQ ID NO: 1826:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 61 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1826:

ACCATCTTGT ACAAAGTGGA TGTCATATGC ACCATCTTGT GTTTTGAGCT GCATTTAATT

G

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 56 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1827:

ACCGTTTCGC CAAGCCGACC TAATTTCTCA GCAATATTTT TTTCTACGCC ACCAAT

56

(2) INFORMATION FOR SEQ ID NO: 1828:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 62 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1828:

ACTTATAGGG CGCACTTATT TTTCGCTTCC ATAGCGAAAC TAGTGTCCT TATACGTATG

60

TG

62

(2) INFORMATION FOR SEQ ID NO: 1829:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 54 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1829:

GCTACACACG ATTTACCTTT CTTGTCACGT TTTGCGACCA TCATTGTGAT GATA

54

(2) INFORMATION FOR SEQ ID NO: 1830:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 67 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1830:

GTAATGACCA TCGCTGATTT ATGACATTGT TAGATCTCAT GTGCCATTTA GTCTGCTGAA

60

TCTTGGG

67

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 50 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1831:

ATAACTCTTC GnCAAACTCC TCAACAACT TCTTGTGTTT CATCTTCTGG

50

(2) INFORMATION FOR SEQ ID NO: 1832:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 101 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1832:

AAACGTnAGA ATATTTAATG GAGCCAAGAA TGGTTTACAG ACGGAGAAAT GGGATATGTT

60

GAAGCGAGGC GTACGCGGAA AGCGTACTAG GCTAGAACAC T

101

(2) INFORMATION FOR SEQ ID NO: 1833:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 50 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1833:

TCGTCATCAT GTCTGTGTTA CCAACGTTTG ACGATTTANT TCATGChGAA

50

(2) INFORMATION FOR SEQ ID NO: 1834:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 55 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1834:

ATAAGTTAAT TGATTTATTG ATAAAGAGAA GCCAGATTTA AATATTATTA AACGT

55

(2) INFORMATION FOR SEQ ID NO: 1835:

- (A) LENGTH: 58 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1835:

10 AAACAAGAAC CCCCATATGG TTAAGCTGCG CGTTTCAACA TACGGGGGGT TTTCATAT 58

(2) INFORMATION FOR SEQ ID NO: 1836:

(i) SEQUENCE CHARACTERISTICS:

15

- (A) LENGTH: 125 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1836:

TACGTTTTAT AAAACAAGA ACTAAAGTAT GCAGTGTGAA TTGTTCACTT TCnTGGCGTT 60
 25 GGAATTGATT AAAACGAGAT ATGGTGTGTG GGAAGTTGTT TGTGTTTGCA TATTTTAAAC 120
 CGATT 125

(2) INFORMATION FOR SEQ ID NO: 1837:

30

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 118 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1837:

40 AATCTACAAT CCTGAATCAC TCGTTAAGAT TAAAAGTATC GACAATGAGT ATCTGAACAT 60
 GAGCTCATCT GCCGTTTTTA ATGcnaaaaa CCGGCGGCGG GATATTTTTG ACCACGGC 118

(2) INFORMATION FOR SEQ ID NO: 1838:

45

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 141 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1838:

55 ATTTGGGGTT TTGGGACCCT TACCCAAAAA TTGGGGTTTG GTTATTAAAA AAAAGCCATT 60

GTCCCAGTTT TTGGGATTGC C

141

(2) INFORMATION FOR SEQ ID NO: 1839:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 54 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1839:

TCTGGGGACT AAGTATGTCT CAGGCTTTAT GCTGTTATGT TTGAAAATGA AAGG

54

(2) INFORMATION FOR SEQ ID NO: 1840:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 133 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1840:

ATTAAAAAAC CTTTTTAAAC CGGGAACCCA AGGAAAAATT CCGGGTTTTTA ATTAAAAACCT 60

TTTGTTAATT GGTTCCAAAC CAACCTTTTG GGTAAATTTT AACCAGGAAT TTTGGAAAAC 120

nGTTTTATTT GGA 133

(2) INFORMATION FOR SEQ ID NO: 1841:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 50 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1841:

AAAGTATGGA TTGATCGTGG AGAAGTTCTT CCTACTAAGA AACTAGTCG

50

(2) INFORMATION FOR SEQ ID NO: 1842:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 60 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

GCGTTTTCTT GGGATATGTT TGATGAATGG ATGTTGTAAC ATGTTAATAA ATCGTTGGTA

60

(2) INFORMATION FOR SEQ ID NO: 1843:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1843:

CTGAGATGAA TATTGTGTTT CGCCATACAT ACTGGGTAAT ATCCCAACCA TTGCTGTAAA

60

(2) INFORMATION FOR SEQ ID NO: 1844:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 125 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1844:

CATTACCTGT AAAAGGAAGC TAAAGACGAT GAGTATTTAT AGAAACCAAT TGCCGACCAT

60

TTGCAGCCAT TAGGAGGGTA GGAGGGCAAT CGCGnCCAAA GGTATTAAAC CGTCAATTAC

120

CTTGA

125

(2) INFORMATION FOR SEQ ID NO: 1845:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 126 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1845:

ATCCACCTGG GTTTGTTCTT AATTAACT GntAATTAAT TGGGTTGGGT CCGGCAAAG

60

TCCGGACCTG CAAATCGGAT TTTATCGTTA AATCTTGAAT TCTATTGCCC ATATTAAATC

120

GCAAAT

126

(2) INFORMATION FOR SEQ ID NO: 1846:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 57 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1846:

5 TTTTGGGAAT AAACCAATTA ATCATGGGCA AAAAATAAGC AATCCAAGTA CTTACTA 57

(2) INFORMATION FOR SEQ ID NO: 1847:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 50 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1847:

15 TGATAAATAT TTCATCTAAA GAGAGGGAGT CATTATGACA CTACTTACTG 50

(2) INFORMATION FOR SEQ ID NO: 1848:

(i) SEQUENCE CHARACTERISTICS:

- 20 (A) LENGTH: 65 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
25 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1848:

30 ATCTAGGCAA TGAATGGACG GACTTAATAT TGATGTGCAA CAAGAAGAGG AGAAGCGAAT 60

CAATA 65

(2) INFORMATION FOR SEQ ID NO: 1849:

(i) SEQUENCE CHARACTERISTICS:

- 35 (A) LENGTH: 244 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1849:

45 CGTGTGAAGT CATTACTTTT AATCCCATGA TGATGGTGAT GGATGAGACG ATATCTCTCT 60

GTCTTTAACA GTTAAGTCCA ATTCTTCCAA CGAAACTTTT CCATAGGTG TTTTATAAGT 120

TGGAATACTT GCACAAATCA TaCCTAATTG CTTATCAATT TTCTCAAGAC TGTCAATCAGT 180

50 TATAAGATCA ATTTTATTAA TAATAATCAT GTCACCTAGT TTCAACTGAT CTTCCATCAG 240

GCGA 244

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 106 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1850:

TTTAAAGGTT CCCGGAAGG TTTGAAACCA AACCTTTGCC CCGGCCCCC GGGAAAAAA 60
AAAnTTGGTT TAACCCCGG GGGGGGGGC CCTTAAAAA ACCCAA 106

(2) INFORMATION FOR SEQ ID NO: 1851:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 84 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1851:

TTTTTTAAGG CCCTTGGGGG GCCAATTTTC CCCCCCCCC AACCTTCAA AGGTTGGGG 60
GCCTTTTTTT TTAAATTGGG GGGA 84

(2) INFORMATION FOR SEQ ID NO: 1852:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 52 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1852:

TCATGATTAA AATTCAACAA TTACAACATC ACTTTGGATC ACATAAGAGT AA 52

(2) INFORMATION FOR SEQ ID NO: 1853:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 56 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1853:

ATAAAACATT TCAAGATGCG CTTGTAATTG TATGTGATAC TGCCAATGCT CCACGA 56

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 54 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1854:

AAAAGATCAT GCGCATAATG ACATGGTGAT GATATGAGTA TGATGGTGGG TACA

54

(2) INFORMATION FOR SEQ ID NO: 1855:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 52 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1855:

ACAACAAATG GTAATGCATA AACATACAGC CAATAGCTAC AATTGCACGA CG

52

(2) INFORMATION FOR SEQ ID NO: 1856:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 57 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1856:

ACGGCTGCAC TCATCATGGT CTGTGGCGTG ATTGTTAATG TTTTAGTTGC CCGCTTC

57

(2) INFORMATION FOR SEQ ID NO: 1857:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 192 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1857:

GCAGATAACT TCCTTGATCC TAACAAAGCA AGTTCTCTAT TATCTTCAGG GTTTTACCA

60

GACTTCGCTA CAGTTATTAC TATGGATAGA AAAGCATCCA AACAACAAAC AAATATAGAT

120

GTAATAnACG AACGAGTTCG TGATGACTAC CAATTGCACT GGACTTCAAC AAATTGGAAA

180

(2) INFORMATION FOR SEQ ID NO: 1858:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 77 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1858:

CGCTGCACTT CCTGAACGCA GTGAGACCAG AACGTGGTGT CACTTTCGGT CTATTCGGT 60
TAAGTGTGG TCTCGGA 77

(2) INFORMATION FOR SEQ ID NO: 1859:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 53 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1859:

TTTGGCGTTC GTGATTTTCT CTAGACGTAG TAACTTCCC ACTCTTTCG TCC 53

(2) INFORMATION FOR SEQ ID NO: 1860:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 59 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1860:

TTTCTCACTC GCGATTTC A GTTGTTTTG ATTTACCCGT CTCTTCTATT TGTCTTAAT 59

(2) INFORMATION FOR SEQ ID NO: 1861:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 69 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1861:

AATGAATGTA TGCACATTAA CATCATCAAT TAATCCTTT AATAAATTGA GTTGTAATTT 60

(2) INFORMATION FOR SEQ ID NO: 1862:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1862:

ATTAACTG AGCAAATGTG CATAAGACAT CATGAATTAG CACCAATTGA CAGG 54

(2) INFORMATION FOR SEQ ID NO: 1863:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 89 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1863:

TTTAACCATC ATTCTATGTC AAAGTTTTGA AATGATGGTT ATTTTTTATT GCTTAAATTT 60

ATTATTGCTA CTA CTACTATACC AATGAAAGT 89

(2) INFORMATION FOR SEQ ID NO: 1864:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1864:

AAAGCTGGTA CGCCTGCAGG TACCGGtCCG GAATTCCCGG GTCGACCCAC GCGTCCGGAA 60

CCAAAATTGC ATCTGATGGT CTCAAGGGTC GTGTGTTTGA AGTGAGTCTT GCTGATTTGC 120

AGAATGATGA AGTTGCATT AGAAAATTCA AGCTGATTAC TGAAGATGTT CAGGGTAAAA 180

ACTGCCTGTA CTAACCTCCA TGGCATGGAT CTTACCCGTG ACAAATGTG TTCCATGGTC 240

AAAAAATGGC AGACAATGAT TGAAGCTCAC GTTGATGTCA AGACTACCGA TGGTTACTTG 300

CTTCGTCTGT TCTGTGTTGG TTTTACTGAA AAAACGGCAA CAATCCAGAT ACGGGAngAC 360

CTCTTnTGCT GCAGCACCAA CAGGTnCCGC CAAATCCGGA 400

(2) INFORMATION FOR SEQ ID NO: 1865:

- (A) LENGTH: 51 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1865:

AAATGGCGTA TCTTTATGTA TCAACTAAGT AATCACC AAT TTCTTTCGGA T

51

(2) INFORMATION FOR SEQ ID NO: 1866:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 58 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1866:

GTGTTGCGGA TAATCCGTCG ACATTAGCGT CTGAAGGTAT CATGAGGCAA CTGCGCAA

58

(2) INFORMATION FOR SEQ ID NO: 1867:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1867:

ACAGCAACTG ACCCAGTTTA CTACCGTCAC TCAAATCACA CAGGTGGTAT CAAATCAATC

60

(2) INFORMATION FOR SEQ ID NO: 1868:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 56 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1868:

CAATCTCTTA CCATTTATCT CAGCTGGTGA AAACGGTCCA TTACACTTAG AATAAA

56

(2) INFORMATION FOR SEQ ID NO: 1869:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 65 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1869:

5 GCTATAGACT AGAGGTACAG CAAATTCATG TGTACAGTGA TTAGAAGGCG ATGAGCAAAA 60
GTAAT 65

(2) INFORMATION FOR SEQ ID NO: 1870:

10 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 173 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1870:

20 GCTACTGGCG GGGGATAGTA ACACCCAATG TTACACGTAT ATACGTACGG CTCCTTGATA 60
AAAAGATGAA GCCCTTACAA GTAGAGAGCG TAAGAACGTG ATCATCTAA TGGTAAGGGT 120
AGACTATCCC ATGCCATTGT GGGCGTTGC ATAGGTACCA CGGCACATAG CGG 173

(2) INFORMATION FOR SEQ ID NO: 1871:

25 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 104 base pairs
(B) TYPE: nucleic acid
30 (C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1871:

35 GCTGTGGGAT TGTCTTTTGG CATGGGGTTA GGGAGAGCGT TTCTAAGGGG CGTTTGAAAG 60
CCATTGATCC GTAAAAGGAC CATTGTTGGA AGCnGCCTTA AGAA 104

(2) INFORMATION FOR SEQ ID NO: 1872:

40 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 64 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1872:

50 CCATTATCTC AAGAGGTTCT AGTAAGGGGA TGGCATTGTC TTCTTATGAA TTTGACCAGA 60
ATAA 64

55

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1873:

GACAACCTAT TGTTCCTTA CCATACTGTT GTCCGGTTTG ACAAACGGC GTTCCACAAT 60
 CCATACATCG TGCACCTGG ATAGAGGCAT CTTCTTAGT AAATCGTTGT TGATATGCTT 120
 TATGATGCTT CAAACGGTCT ACCAGTGATA ATTCACCTAA GTACTGTTTG TCATACTTCA 180
 TAAATCCTTT AAATTCACCC ATCGTATCTC CCCCTTTCCT TAATACACAA CGGCTGGTTT 240
 ATGTTTAGCA TCGATTGTTT TGA CTGTC A TCGTAAATG CAGCTAACAT CGCTTCATCT 300
 TCCATTGTCA TGTGAAGATT TTGTGGCAAA nGGAATTTTT TGCATCAATG AATnGGTGAA 360
 CCTTTGGGGG TGACCTT 377

(2) INFORMATION FOR SEQ ID NO: 1874:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 78 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1874:

ATTATCTGAA TACGCAGCAG TTGCAGCACT TGATGGATCA GCAGTATTTA AAAGAGGTTA 60
 ACACATTACC CAATAGTG 78

(2) INFORMATION FOR SEQ ID NO: 1875:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1875:

CTAAAAGAAG TTAAAGAGTG TGATGGTAGA ATTATATTAT TTATTGATGA AATgCCATAT 60
 GCTTG TAGGT GsTGGTAAAA CAGATGGTGC CATGGATGCa GGCAACATGC TAAACCAAT 120
 GTTAGCACGA GGAGAGTTAC ATTGTATTGG TGCAACAACT TTAAATGAAT ATCGAGAATA 180

TGTGAAGAT ACAATT

256

(2) INFORMATION FOR SEQ ID NO: 1876:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 286 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1876:

AGCGCGAAAT TGAGCAAGCG GAACATGCGA CTGATGAAGA AAAACAAGTT GCTTTAAATC 60
 AATTAGCGAA TAATGAAAAA CGTGCATTAC AAAACATCGA TCAAGCAATA GCAnATAATG 120
 ATGTnAACGT GTTGAAACAA ATGGCATTGC TACACTAAAA GGTGTACAAC CTCATATTGT 180
 AATTAAGCCT GAAGCACAAC AAGCAATaAA AGCAAGTGCA GAAAATCAAG TAGAATCAAT 240
 AAAAGATACA CCACATGCAA CAGTTGATGA ATTAGATGAA GCGAAT 286

(2) INFORMATION FOR SEQ ID NO: 1877:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 74 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1877:

ACTTCCAAAC ATGATAAAGA CAGACTACTT CACAGGTTTA AGGGAAGCAA CCACATTAGC 60
 GGGATTCACC CTAT 74

(2) INFORMATION FOR SEQ ID NO: 1878:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 52 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1878:

TTTCATTAAG TTCAAAAAAT CTCAATAACT TTAAGGATTG GTCCGCATAT TA 52

(2) INFORMATION FOR SEQ ID NO: 1879:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 60 base pairs

- (C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1879:

ATACCCCTGA GATTAATTAC TTGTCCTTTT TTTAGAACAA CATCTCCTGG CTTTGTTTCG 60

(2) INFORMATION FOR SEQ ID NO: 1880:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 60 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1880:

AATATCATTATAATATCAT TGATGCAAGT CCTATTGTGC ACAACTGGGG TGATTGCCTT 60

(2) INFORMATION FOR SEQ ID NO: 1881:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 56 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1881:

ACAATGGCAC ATGGACTTAT GCCTGGGGTG TCCTGTTCGT CGCAGCATCA AAATGA 56

(2) INFORMATION FOR SEQ ID NO: 1882:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 121 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1882:

TGCAAAGCAT TGGCACATGG CCAGTCAGTT TTACAACGTC GTGACTGGGA AAACCCGAGA 60

NGCGACGTTG TAAAACGACG GCCAGTGCCA AGCTTGCATG CCTGCAGTCG ACTCTAGAGG 120

A 121

(2) INFORMATION FOR SEQ ID NO: 1883:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 56 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1883:

ACATTTAATG TATAACCACT TTCAACATTG CCGATTTAGT GGCAGCAGTT GCAGGA

56

10

(2) INFORMATION FOR SEQ ID NO: 1884:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 52 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1884:

20

TGCATCCATT TGATTGAATT TTATGTTTGG ACCAAAGCCG GTTGCAATGT AC

52

(2) INFORMATION FOR SEQ ID NO: 1885:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 51 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

25

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1885:

TGAAAAGTGG TGAATGGTG TTAAGTTG GTGGGTAATT TTAGAGAAGA G

51

35

(2) INFORMATION FOR SEQ ID NO: 1886:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 95 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

40

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1886:

TACACGAACC ATACTCACCA GGTTCCTG TCATGAGGCG ATATTTTGG TCATTTATA

60

TACATTTATC CAAATTCATC TTTTAAATGT TGAGT

95

50

(2) INFORMATION FOR SEQ ID NO: 1887:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 65 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1887:

GCTACCAAAG GCGTTTACC TATTGCTAGT CACTGCAAGT GGCTTAGCTA TGCAGATCAA 60
CTGGT 65

(2) INFORMATION FOR SEQ ID NO: 1888:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 60 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1888:

GTGGGACCAA CTGGCCGGTG ACGGTGGTAA AGGTGCTTCA GTCGTATTGA AGTGGGATGA 60

(2) INFORMATION FOR SEQ ID NO: 1889:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 57 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1889:

TGTTGGAGAA ACAGTTAACG AGGTTTAATG TTAAAAAAGC AACGTATCAT GGGTATA 57

(2) INFORMATION FOR SEQ ID NO: 1890:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 64 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1890:

TGGGATCTGC TTGCAAATAC ACAAACCTTT CTGGATTTTA TTACAATTGC AATATAATCA 60
AACA 64

(2) INFORMATION FOR SEQ ID NO: 1891:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 59 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1891:

GGCATCCACT CAGATAAAAT AAAGATGTCA AAAAGGCCAA GATGGTGCTA AAAAAACAA 59

(2) INFORMATION FOR SEQ ID NO: 1892:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 54 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1892:

GGTATCTCAA CGATCCTTTA GGTTAATTCG GAAATTTCTA CACGTGAGTT AGCA 54

(2) INFORMATION FOR SEQ ID NO: 1893:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 52 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1893:

TTGTCTTGGC AATGGCAGAG CAACAGAAGT TAAAGTGCT TGCTGATCAT AT 52

(2) INFORMATION FOR SEQ ID NO: 1894:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 79 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1894:

TAAACCTATA CCCTGTAAAA AGAAAAATCG TGGATCGAAA GAACATGTAT GTGGCATTTA 60

TGATTGATGC TCAAGCAGA 79

(2) INFORMATION FOR SEQ ID NO: 1895:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1895:

TTATAAAGGA GAGAAATCCT TAATTATGAA TAAAGCATCA TTTGATAAAA AAGTTAAAAA 60
 5 GCAATTATGG TTTTGAACA AGAAGGAGAA ACAAGCATTG GATCAACGAT TGTCTTCTAT 120
 ATCTGATGAT GACAGCGTTA ACTTAAATAA GCCTGTTACC TTTGCTAATG CTTACTTAAG 180
 ACAAAATGTA TTTCGAAATA AAGAAACAAA AAGTTATAGT ATGTTTGTTA CATTAGTAGT 240
 10 GATGATGTTT GCTTATGTTG CTTTATTAGG TTTGTTTATA TTTGGGCTAA TTACAAGTCT 300
 ATCTGGCGTA CAATTTTTCG TTAGTCCTAA GGTAGATTTA TCTACnACTG TTGTTATTTT 360
 15 AACAAThATT GGAGCGA 377

(2) INFORMATION FOR SEQ ID NO: 1896:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 58 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1896:

TTAGGATCCG TCTTTGCCGC AGCGTGGGTG TTCCGCGAGC GCTTCTTAGA GGTTTTCG 58

(2) INFORMATION FOR SEQ ID NO: 1897:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 445 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1897:

ATCGCTCAAA CCGAAATTGA AAATGCATCT ATTACTTCAT TAAGCCGTTT ACCAGACGTT 60
 ATATTAGCAT TGAAAAGTGG AAAGGTTGAA GGTGCTGTAG TTGAAAACC TGTAGCAGAA 120
 GCATATTAA AACAAAATCC TAAATTAGGA ATTTCCAATG TGAAATTAA TGAAGAAGAA 180
 45 AAAGATACAG TGATAGCAGT GCCAAAAGAT TCACCAAAAT TATTGTCACA AATTAATAAA 240
 ACGATTAAGG AGGTTAAAGA TAAAGGATTA ATCGATAAAT ATATGACTAA TGCTGCAAAT 300
 50 GCGATGAATG ATGACAGTGG TTTTATTTCT AAGTATGGTA GTTTTTTCTT GAAAGGAATT 360
 AAGATTACAA TATTAATTTT ACTTATCGGT GTTGCAATTAG GTTCTATTTT AGGTGCATTC 420
 GTTGCGTTAA TGAAATTAAG TAAAA 445

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 101 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1898:

ACCTTTTCAA TGTTGCTTTG ATATAAATTC ACAAAGTTGA CTTTThAATT CTTCAATAGA 60
 TTCTCTACTG CGATAGCTGA ATTGCCATCT TTTCTACTAC T 101

(2) INFORMATION FOR SEQ ID NO: 1899:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 75 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1899:

TGCCCTGGAT GCCTTTAACT TGATTCATGA CCTGTGGTTT TATTTCAATT TAGATGAGCT 60
 ACCTTCAAGA CCTTC 75

(2) INFORMATION FOR SEQ ID NO: 1900:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1900:

AGCAATACGG AACTGATGAA CGGAATTGTA ATACGAGAAT ATGAAGCATC AACG 54

(2) INFORMATION FOR SEQ ID NO: 1901:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1901:

AGTACCTGAG TATCGCAGAC CGGCTTCAGG TCGTAGAATT TCTATACGTG GAGCTAGAAG 60

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 51 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1902:

GTCTAACTAC AGCATGCCGG CTTATTGTTG CACTTTCTCA ATATTTCAT A

(2) INFORMATION FOR SEQ ID NO: 1903:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1903:

GGATTnAAAC GTGCATTAAAC GCGTGnTTA AATAGTTATG GTTTAAGTAG

(2) INFORMATION FOR SEQ ID NO: 1904:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 53 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1904:

ATCGTATTTA TTTCAGCGAG TAGCGGTAGC CTTCAATACA CAAAGATTTT ACC

(2) INFORMATION FOR SEQ ID NO: 1905:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1905:

ATAAGACGCT AGATCTGGTC AATTtATTTC CGATTTTTTTC AACACTATTC

(2) INFORMATION FOR SEQ ID NO: 1906:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 51 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1906:

TTCATCTGAA TCGTCGGCTT TCGCGATTAC TTCTTCGTCA GGGTTGCTAT C

51

10

(2) INFORMATION FOR SEQ ID NO: 1907:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 55 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1907:

20

CAATTGCTAA TAATCCTTTT AAGTCATTAA TGATTGATC TTCCGTAATG TTGAA

55

(2) INFORMATION FOR SEQ ID NO: 1908:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 53 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

25

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1908:

TTGCCAAACA GACATGACTT AAATTTCAAT ATCTTCTTTG ACTGCATCGA TAT

53

35

(2) INFORMATION FOR SEQ ID NO: 1909:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 94 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

40

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1909:

TGAATTTCTA TACAATTATG GGGGAAGGGTA TTGGTGAATT GGAATGGGCT CCTAAGTTTA

60

CAAGCCCCCA TTCGATGGCC GTTAAAGTTT TTAA

94

50

(2) INFORMATION FOR SEQ ID NO: 1910:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 66 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1910:

5 AACATGATCG TGGGGGGATG TTATGTTTGT TCATATATTT AGGAAGTCGT TTGTAGTTAT 60
TGTTTG 66

(2) INFORMATION FOR SEQ ID NO: 1911:

- 10 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 55 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1911:

20 ATCTTCGCTC CACTTACTGC AATAAGGATT TGC GGCAATC CTAAACCGTT TTCA 55

(2) INFORMATION FOR SEQ ID NO: 1912:

- 25 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 59 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1912:

AACAATCGTA ACGATACAAC GCAATCTTCG AAAAATAATG CAAGTGCAGA TTCCGAAA 59

(2) INFORMATION FOR SEQ ID NO: 1913:

- 35 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 51 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1913:

45 ACACCACACA CACACACACA ACACCCACA CAACACACAC AAACACACAA A 51

(2) INFORMATION FOR SEQ ID NO: 1914:

- 50 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 111 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
55 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1914:

5 TGTACGACT TGGTCGACCT GGCAAGCGCT TCGCGCACGT TCTGCAGCnT CTCACTTATT 60
GGTATCGCGA TGCGACGTTA AGAAATTTTCG GAGTTCTGGT CACCTTATGT T 111

(2) INFORMATION FOR SEQ ID NO: 1915:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 56 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1915:

15 TGGTCCGCTC TCAATCGCAT CTTCAGGTTT TACTTGGCAA AAGAGCGCGG TGCTCA 56

(2) INFORMATION FOR SEQ ID NO: 1916:

(i) SEQUENCE CHARACTERISTICS:

- 20 (A) LENGTH: 62 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1916:

30 GCCGACAGTA AAATAAAGGT ACTTGATATA ACATATAACG GAAAGCAACA GTTACTGTCA 60
CA 62

(2) INFORMATION FOR SEQ ID NO: 1917:

(i) SEQUENCE CHARACTERISTICS:

- 35 (A) LENGTH: 103 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1917:

45 ATGATATTTA TTTGATTGAA GAGATGTTGC TTAACAAGA AGACGTACAA TTGATAnAAC 60
GTAAAGATTA TATTCAGCAC CCTAAAGAAA ATGGTTACCG CAG 103

(2) INFORMATION FOR SEQ ID NO: 1918:

(i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 60 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1918:

5 CAGTGTAGCG TGTGTCATGC CGTTTTACCA CAATTGAAGA CTGAGCTCTA TCCCTGTGCC 60

(2) INFORMATION FOR SEQ ID NO: 1919:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 117 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1919:

15 TCAAATTAAC TTCCAACAAA AACAAATGCA AGGTGAAGAA ATTGCTGAAG AAGATTTACA 60

AAAAGCGCAA GAACAAGCGC AAGCAATTGA AAAAGATGAA AACATCTCTn CATTAAT 117

(2) INFORMATION FOR SEQ ID NO: 1920:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 400 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1920:

30 TGCCTAATGA AACATTTAAA AATATTTTTA AATATATCTA TCAACACATC GTTCTATTAA 60

TTGGGATTGT TAGTTTTCTC AAAGGATTTT TAGGATTTTT CATGGAAAAA AATGGAAGTA 120

35 ATTTATATTT TGTTCATTC CCGTTTTT CAG TAGTCGTTGG ATTCTTTATT GTCTTTTTAT 180

TTATATGGTT TAGTTTTAAA ACAATACAAC TGCAGTGTTT TAACAATTCA AATTGGATAT 240

GGATATTCAC CTATTTAGCA ATCATTCTAC TAATTGTAGG ATTTTTCTAT GTATTCTTTA 300

40 TTCCACAATC ATTACTTGCC TTTGGACCAT ATATTCAGGT AAGCAATTGG GTATTTATTA 360

TATTTTCATT TATAGTTATG CCTATnGGAT TACGCATTGA 400

(2) INFORMATION FOR SEQ ID NO: 1921:

(i) SEQUENCE CHARACTERISTICS:

- 45 (A) LENGTH: 122 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
50 (D) TOPOLOGY: linear

TCACAGTCAT CATTThATT TCGATTTTCA ATAATTGTAT TTTTAATTTA TCTTGATATT 60
 CATTAGATT TATACAAGCT ATCTTTAACA TTGCCCTATC TTTGATATAT TTCTTGCAAT 120
 5 CG 122

(2) INFORMATION FOR SEQ ID NO: 1922:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 410 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1922:

AGAAGATACC ATACACATTT aATTAGTTAC AGCATAAATC AATTTATACC CTTAATTATT 60
 20 ACATTGTTTA TATTTTAAAT TCGGGGGAGT AATTTTAAGT AATATCTTGT TGCTGCTAAT 120
 TCTATTGTTA ATAAATTGAT ATTAGATGTA GAAATTGAGT GTGAAAGTTA ATAATAGATG 180
 ATTTAGCTAG TAACATAATT AATTCATATA TAGTCAAAAA GTTCTGTTAG ATACTGTTCT 240
 25 TGATGAATAT TCTTTGATGT TAGGTGTTAG CTATTCTAGA TGAGTTTCTT AGATGTGGAT 300
 GCCTGTCTTG ATGAAGTTAT CTATGATGTT AATATAATAC TTGATGTTGA TTCTTAGATG 360
 TTAGTGCGAT TTCAAGATGC TGATTCTTTG TTGTTGCACT ATCTTGGTGA 410

(2) INFORMATION FOR SEQ ID NO: 1923:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 348 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1923:

TTTCTATGGT TTATCAGGTG ATTTTACGGA AAACAGTGAA GATTATGGCG TATACCGCTT 60
 TAAACGTGGA TTTAATGTAC AAATCGAAGA ATTAATAGGG GATTTCTATA AACCAATTCA 120
 45 TAAAGTGAAA TATTGGTTGT TCACAACATT GGATAAATTA CGTAAAAAAT TAAAGAAATA 180
 GATGTAAATG ATGTTAGGGC TTATAGThAT TGATACTATA GGCTCTTTTT TATATGTTTT 240
 TTAATAAAGC CTCGAATAAT GATATATTAA ATGACAAGTT TAACAAGTGA TTGCAATAAA 300
 50 TATAAAThTG AATTGCACAA CCGATTThA AATGATTGAG TTGAGGAA 348

(2) INFORMATION FOR SEQ ID NO: 1924:

- (A) LENGTH: 253 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1924:

10 AGGGCAGATT TAAGCTAACT TGGAAATGTTT TCGAGTTTTT GAGTTAGTTC TCTATCCATT 60
 TTTTCAGTTA CATGAGTATA TATGCGAATG GTTGTTTGT CATCTACATG TCCTACCCTT 120
 TTCATAATTG CTTTAAAGA AACATTCATT TCTACTAATA AAGTTATGTG TGTATGTCTA 180
 15 AATGTGTGCG TGCTAACTTT CTTATTCATA TTAAAGCTT TTGTACGTTT TCTTAACGCA 240
 CACCGGCCAT TTC 253

(2) INFORMATION FOR SEQ ID NO: 1925:

20

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 52 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1925:

30 GGTATAGGTG CAAGTCCTAT CTTCCGCTCC ATGGTTTAAT GATAATGCGG GA 52

(2) INFORMATION FOR SEQ ID NO: 1926:

35

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 84 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1926:

40

TGGTCACTGT TCCTGATGCT TACGTTAGAA TGTAAGATT CCGATTTATC AGTTATATAC 60
 TGTTTGCTTC ACTTTGGAGA TCTG 84

45

(2) INFORMATION FOR SEQ ID NO: 1927:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 56 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50

55

CTTTCTAAAT AATTCTAGTA TAGTTTTTAT TCAAATACGC TAGGCTCAGA GCTATT

56

(2) INFORMATION FOR SEQ ID NO: 1928:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 138 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1928:

GCAAATTGTC ATTAGACGGA GTATTATTTA GAATTTTCGG TGATATCCAC CGGCACAAGA 60
TCGATGTTGG ACAATATCTA ATATACTGAT ACGCATTAA ATAGAAGAAG GGAATTAGAG 120
TTTGTTTnTG AATGCAAA 138

(2) INFORMATION FOR SEQ ID NO: 1929:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 52 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1929:

ACATCTTTAT ATGCTTCAAC ATCAAATACA CCACATATTG GTAAACAACA AA 52

(2) INFORMATION FOR SEQ ID NO: 1930:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 51 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1930:

TTTAATGTTT ACAACACCGG AATAATAATA ACTAAAGCGC CGCTAATAAA T 51

(2) INFORMATION FOR SEQ ID NO: 1931:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 400 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

ACGAAAAATA AATAATCATT TCACCTTTAT AGCCAGTATT TTTAATTAAT ATATTTTCAT 60
 CTATTAGCGC TTCTAAAAAT CTATTGACT TTTGAACATA CTCTTTAGCT ATATTATTAA 120
 5 CAACAGTATA GGATTCTCA TAATTTAGTT GATTAAATTC TGAGTCGTTT ATTAATTCAA 180
 CTAATCCTTT TATTACTTTT TGTACAACAT TAATATTTTT ATCAAAATCA AATTTATCTT 240
 CCTTAGATAA ATTAATAnnn AAAGTCTTAA GAACATTTGT AAATAGCTCT GCAACACTTA 300
 10 TAGTTTGGnC AAATTCCTTA AATTTATTTA CACAGTACTC ACACATTAGT TTTAAAAATA 360
 ATGGATTGTT GAATTCTGGA TTTAATATAG GTAACCTAGG 400

(2) INFORMATION FOR SEQ ID NO: 1932:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 100 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1932:

25 ACTTGCGGAA nGACGCAACG TTTATGTACG TTGAAGAAA AATTCAGGAC TTACGTTCAA 60
 AACTACCATA GCAATATGCA TTGAAGATG ACAGTATGCG 100

(2) INFORMATION FOR SEQ ID NO: 1933:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 61 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1933:

40 CGCTCTGCTT TAAGCGTTGG GACTTTGTCA ACGGTAGTGG ATGGGAAGTG GTTCTGCTTT 60
 G 61

(2) INFORMATION FOR SEQ ID NO: 1934:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 53 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1934:

(2) INFORMATION FOR SEQ ID NO: 1935:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 56 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1935:

ATGTATTACG GTTTAATTAA GCCACATACC AACAGATTG CATTATGGT ATCTCA 56

(2) INFORMATION FOR SEQ ID NO: 1936:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 61 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1936:

TCGCACCAGA AACAGGGAT TGTTAAAATT GCGTAAATCC TTAAATTTAT TTGTAAATAT 60

A 61

(2) INFORMATION FOR SEQ ID NO: 1937:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 51 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1937:

ATGAATAATC ATATTCTAA TCAAAGTAAT AGCATTATA TTGTGTTAA A 51

(2) INFORMATION FOR SEQ ID NO: 1938:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 56 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1938:

TTGCTGAAGA TAGAGGCTTC ATGAAGGTGG AGAAGTTAGC TGATTCTGG AACAGG 56

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 51 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1939:

ATCTCAATGT ATTCTCTAG TGTAAGTTCT TCATAAATAA CCGGTGATTC C 51

(2) INFORMATION FOR SEQ ID NO: 1940:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 318 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1940:

CTCAGGTCGA CTCTAGAGGA TCCCCTGTTA AATAAACTT CTTAAGCACA TACTTATTTT 60
 ACTATGCCTT TTACGTTCCC CTTATACTTT TCTCACATCT TTCTCTTAGA CTACTCCCTT 120
 ATACGCCCCG CTCAATATCT TTAATCATTT CATCTACAGT TATTTTCGCA CTCGTTAAGA 180
 CAATAGGAAC GCCTGGCACC TGGATGCGTA CTTGCACCTG CAAAATATAW ATCTTTTATAA 240
 TCTCGCGATA CATTyTGTGG ACGATAATAA TTACTTTGCG CTAAAGTTGG GCATTAAACC 300
 GAATGCCGAA CCAAATTC 318

(2) INFORMATION FOR SEQ ID NO: 1941:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 57 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1941:

CCGGGAAAAT TTTTGAATT AAGTGAAAA AAAATCCCCT TAAAATTCCC CTGGCCA 57

(2) INFORMATION FOR SEQ ID NO: 1942:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 378 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1942:

5 TGTTCCTCTT TTGAATCTGT TTTATTCGTT TGTTCCTCTT TTTTCTGTTC ATCTTTCATA 60
 TTTCCACATC CCCCAATAAA AATGATTAAA AGTAATACAC TCATGTACAA AGCAATTTTT 120
 TTTATATACT CCATCATTTT ACATCTCTCT GTTTTAATTT TATAAACATT TGAATATTTT 180
 10 ATACAACCTTA TTAATAAGT GATTATTCAA CTTTATGTT ATCAAACAAA ACTAATTAT 240
 TCAATTTAAT ACATGTAATT CATTTTAACT TTATTATTAA ATGTTCTAAC GTnATTTTTT 300
 ATATTAGTAA TTATATTTAT TTATCCTCGC TTGGATTAAA GTAGATACTA TCTGTGAAGT 360
 15 AnATATTTTC TGCCTTGn 378

(2) INFORMATION FOR SEQ ID NO: 1943:

(i) SEQUENCE CHARACTERISTICS:

- 20 (A) LENGTH: 394 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1943:

25 AAGAAGAAGT CAAAATTCAG CTAAGTAAAA GCTCGAGTTA TAAAAAAGTC TAAATTGATT 60
 30 CAACAGGAGT AGAAAAGGAA ATTAGTCTTG CATATTTTAG AAAATGAATA AAAACAGTTA 120
 CTATATGCAA CTCAAGAATT AAATATTATT TAAGCCACAT ACCTATTAGA GTACAAAATA 180
 TACAAGTTGT ACTTATATCT AGGTATGTGA CTTTGTATTT TAAGCGTAAA GTAAAAGTTT 240
 35 TTATGTTTGT ATTAGTTCTA AATTATTTTG CACTTGGATG ACACGTATTT TTGAGTTTAA 300
 GTGGTGACTC AAGTTCAATA AAATAAATAT CAGATAGGAT AATTTGAnAA TnATATGAAA 360
 40 GGGTTATCTC CAAAATnATC TCCATATTAT AAGG 394

(2) INFORMATION FOR SEQ ID NO: 1944:

(i) SEQUENCE CHARACTERISTICS:

- 45 (A) LENGTH: 52 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1944:

50 TATTCGTGAT GACGATTGTC GGTGACATGA AGTTCTATTT GCTGGCACTG AT 52

(2) INFORMATION FOR SEQ ID NO: 1945:

- (A) LENGTH: 82 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1945:

10 CGTTTAAAAA ATGATATCAA TCTTTATTGT GGATTGCAAC ATCCGTGTGC TCCATAAAAC 60
 GTGTGGCGAG ACTTGGGAAA GG 82

(2) INFORMATION FOR SEQ ID NO: 1946:

15

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 70 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1946:

25 GTATTATTGA TGAAGAAACA GCTCTCCAGT TGTAGATGCA TGCTACGTTC ACGTTACCAC 60
 TGTATCAATT 70

(2) INFORMATION FOR SEQ ID NO: 1947:

30

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1947:

40 TATCACCAGC ACCAAGGnTA ATGACATGCT GATCTTTTGC AGTTATGGTh 50

(2) INFORMATION FOR SEQ ID NO: 1948:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 117 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

45

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1948:

ATTGTATGAA TCTTTGGGGA ATGAACThn AACGAACGGA CATCTTGCAA TGACGCATCA 60
 55 AAATGGTTTT AACACATGTA ATCGGCTCTC GGTACTATTC GTGTGATGTA CACATGG 117

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 64 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1949:

TTTGATGATT TCGGGATGGA TTGGTATTGT GGTGAATGAA TTTTITAGCT CATCATCAAA 60
TTAG 64

(2) INFORMATION FOR SEQ ID NO: 1950:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 57 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1950:

CTCTAGTGGC CATTCAATTT TGTCGCTGAA TGATGTTGGT ACATCCATTG CTGCTGT 57

(2) INFORMATION FOR SEQ ID NO: 1951:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 68 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1951:

CTGTCCTTCT GAAACTTGGG TATTTAATTA GGAATAGTTA AAAAAATCAT TCACAGAAAC 60
ATTTAATA 68

(2) INFORMATION FOR SEQ ID NO: 1952:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 106 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1952:

TTAAATTAAC CTTAAGGTTG GATTITTTTAA CCCCCAAATT TTTGGGGTGG TTAAAATTCC 60

(2) INFORMATION FOR SEQ ID NO: 1953:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1953:

GACATTACA CTGCTTCAA TCTGGTCCAG TGCAGCATCT AATTCTTCGA

50

(2) INFORMATION FOR SEQ ID NO: 1954:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 107 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1954:

ATTGGCCAA CTGTTCAACA CGGTATTGGT TCAATGCAAC ACTTTATCAT TGCTTCAGGG

60

CTATATCGGT GGTATGGGTT GTATCACTTC TTAGAACGTG GTATTAA

107

(2) INFORMATION FOR SEQ ID NO: 1955:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 54 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1955:

GAAGTGAATA TGAAGCTGCT AAAGACTCCG GAATGCTACC TCAGACAACT GATG

54

(2) INFORMATION FOR SEQ ID NO: 1956:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 365 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1956:

ATGATTATTT TAGTTCATT TGTTGAGTCG ACTGCTAAAG TTCCATTAA ATGTTGTACA

60

ATAAGCAGTA ATTTATGATT GTTTACAGTT TTTAATTTAC CATGAACTTT TGAAGCATTT 180
 GCATGTTTAA TAACATTATT TATCGCTTCA CGCGTAATCA TAACTAACAT AGATTGTTTA 240
 5 GTAGGACTTA ATACTTGGCG TAATTCTTTA TTTTCAAATG TAAAATCAAT ATCAGCATCH 300
 nTnAAAACTT TACGTATACT ATCAATCTCT TCAATAAATG ATGGTAATTT TACATCATCA 360
 ATAAT 365

(2) INFORMATION FOR SEQ ID NO: 1957:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 346 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1957:

AAATAATGTC ACAAAAGTTA AAGATACTAA TATTTTCCA TATACTGGTG TAGTTGCTTT 60
 TAAAAGTGCA ACTGGATTG TAGTTGGAAA GAATACTATT TTAACAAATA AACATGTGTC 120
 25 GAAAAATTAC AAAGTGGGCG ATCGTATTAC TGCACATCCA AATAGTGATA AAGGTAATGG 180
 TGGTATTTAT TCGATTAAAA AGATTATTAA TTATCCAGGT AAAGAAGATG TATCAGTCAT 240
 TCAAGTTGAA GAGCGTGCAA TAGAACGTGG ACCAAAAGGC TTTAATTTTA ATGATAATGT 300
 AACGCCATTC AAATATGCGG CAGGGGCTAA AGCTGGTGAG CGAATT 346

(2) INFORMATION FOR SEQ ID NO: 1958:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 390 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1958:

TTTTCCAGTT AATTTTCCA GTTCACTAAA TACTTTATTG ACTGTACCAG ACCCAATAAT 60
 45 AATTGGTAT TGTCCCCAG TAGAAAACGT CCCTTTAACT ACATCCATAT TGTTTAGCGC 120
 CTCTTCATT ACTAACTTT CATCATTTAA AACTAATCGT AGTCTCGTTG CACAATGCGC 180
 50 CATTGCATCT AAATTCTCTT CTCCGCTAT CGCGTTCAAA ATTTCTTCTG CGGATTGCTT 240
 ATAATTCATA TATTTAGCCT CCTAATTAGA ACCGGTTCCA TTTATTCCAC TTTATTGTAA 300
 CCGGTTCCAA AAATATTGTC AACACTCTAT TATCATTTTA TATAAACACC TACACCATT 360

(2) INFORMATION FOR SEQ ID NO: 1959:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1959:

GATTGCATAT AATAGTAAAA ACATTACATC TTGAACAGTA CTCGTTTGT

50

(2) INFORMATION FOR SEQ ID NO: 1960:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 57 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1960:

AATTTGAACC AGACACTGAT ACAAGTCACA CCCAGAACT TTAAAGGACG TAAATGT

57

(2) INFORMATION FOR SEQ ID NO: 1961:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1961:

AACGCTATAT TAGCGATATA CAATGATGCC ATTATCAATA nTACAnCTGn

50

(2) INFORMATION FOR SEQ ID NO: 1962:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 60 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1962:

TACAACGTCA GTTGGCAGAC ACCAGAAGAA GGATTCATAA GTATATTCAG GAACTTGTTA

60

(2) INFORMATION FOR SEQ ID NO: 1963:

- (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1963:

10 AATTTTTCCTT CCTTTTAAAA TTTCCCAAAA AAAAnCCCCC AAnAAAAAAA 50

(2) INFORMATION FOR SEQ ID NO: 1964:

(i) SEQUENCE CHARACTERISTICS:

15

- (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1964:

CAACAAGTAG ATGCATCAGA GAGTAGTGT CAAACGTAA TAGATGTGGC ATG 53

25 (2) INFORMATION FOR SEQ ID NO: 1965:

(i) SEQUENCE CHARACTERISTICS:

30

- (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1965:

35

AGCAAAGGCA TAACTGCTAA TGACCATGTA AATGAGACGA GTCGATCGTG GCCA 54

(2) INFORMATION FOR SEQ ID NO: 1966:

(i) SEQUENCE CHARACTERISTICS:

40

- (A) LENGTH: 252 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1966:

CTCAAATAAC TGGCTCAACT CAACCGGTCT ATAACACCAT AACACCGCAT GCCACTCTAG 60

50

CATACTCAAT CGCTCTGGTA CCAGCnCTCA AATAACTGGC TCACGCCAAC TGTCTATAAC 120

ACTAACACGC ATGCACTCTA GCCTACTCAG AGCTCTGGTA CAGCACTCAA TAGCTGACTG 180

55

TCACAGTCCA CACACACTCA ATACTGGCTG ACACAGTTCA CACACnGCTT ACTCGCTCTC 240

(2) INFORMATION FOR SEQ ID NO: 1967:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 59 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1967:

CAGTTTAAAC TCGATGTTGT GTACTACTGT GCCAGCTGGA ATGTTTTATA ATGGTGATG 59

(2) INFORMATION FOR SEQ ID NO: 1968:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 52 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1968:

GTTACATGGC ATCAGCCAA ACCTGTCTAT AACACCATAA CACGGCATTG CC 52

(2) INFORMATION FOR SEQ ID NO: 1969:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 58 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1969:

ACAATTTTAA TTATATAACT CCAGGGGCTA CAGTAATACG ATTTCTCCAG ACTCCAAA 58

(2) INFORMATION FOR SEQ ID NO: 1970:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 59 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1970:

TGACGTATAA TGGATGAAAG TCTATTAAGT TTAAGAAGCT AATACTGTGA AATCTTTCT 59

(2) INFORMATION FOR SEQ ID NO: 1971:

- (A) LENGTH: 52 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1971:

TATCATGTGA TCTTCAATCG TTCACCAACA GTCATTGCT GCATCAGTAA CG

52

(2) INFORMATION FOR SEQ ID NO: 1972:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 58 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1972:

TTGCTGGTGC CATAGACTAC ACTTGTTTGA TATCAGAAAT GGGATCTGTT CCATTACC

58

(2) INFORMATION FOR SEQ ID NO: 1973:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 209 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1973:

AGTTAAACCG AGTCCAACCC AAACCTCCAA TCCACCTAAT GGTTAAAATT CCAAACCATT

60

ACCAGGGAGG GACCAAAAAA CGGAATGGGG CCTATTGGTA GGGTACCTAT CCCATTTAAA

120

AATCCATCCA AAAGCCCAaA TTATCGGACC ATTTTCGCCA AAAATAATTT AAGCGGAAAT

180

TGAATACCTT AAAATTCTCn GGGCCCACT

209

(2) INFORMATION FOR SEQ ID NO: 1974:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 69 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1974:

ATCTGAGTAT TTATAACATA AATCACTAAT ATCGTTATTA CATAGGGATA GGGTAAAAGT

60

(2) INFORMATION FOR SEQ ID NO: 1975:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 118 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1975:

TTCTTCATC CGAGTCTGAA TCGCTGTCGA ATCACGTCGA GTCGATCGCT ATCAGGTCGA 60
 GTCGCGTCGA ATCGnTCGCT ATCGAGTCGA TCGCGTCGAA TCGAATCACG TCGAGTCG 118

(2) INFORMATION FOR SEQ ID NO: 1976:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1976:

TTGCAACnTT TGATCTAGAT ACTACCTTAG TTGGATTGTA CTAATTGATT CTAATTCACC 60
 TTTAGTTGGT TTTGTAGCAG GCGTTTTGTC TTTACCTGAC TCACTAGATG CGTCATTTTC 120
 TTTTCAACA CTTGGTAATT GTTTATTGTC ATCTTTTTGG CTGTCTTGTT TTTGTGATTC 180
 TTTTCAACA GGTGATGGTG TTGTTTGCT AGGCGTACTG GAGTAGCTTC CTTCTTAGCT 240
 GAGTTATCTT GTTGTTCTTT TTTGTTAGAT TTATCGGTAT TGGCTTTTGT AAATGCTTCT 300
 nTATCAACGA TTCTGACATG GTATTGTCCA TCATAATCAA TCGTTTTTAC GTGAACTTTA 360
 ACGATAGCAT CATATAGAGT TTACCTTCAA CATATGGGAA 400

(2) INFORMATION FOR SEQ ID NO: 1977:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 74 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1977:

TAGACAAAGA CAGTAACAGT AAAGTACGCT TCAGAACTGA TGGCTCACTG CGAGTATAAA 60
 AACTTGTAGT GTCC 74

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 72 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1978:

ACTCAAAAAC TCGGAAAACA TTCCAATTTA GCTTAAATCT GACCCTTTTT TTGACCCTTA 60
 TATTTTTTAC AA 72

(2) INFORMATION FOR SEQ ID NO: 1979:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 69 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1979:

ATGTCATTGG CTTTGAACCT TATCTTCAAG CACCCAATCG TTTTAACTTT TCAAAATTTG 60
 GCACCATAA 69

(2) INFORMATION FOR SEQ ID NO: 1980:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 109 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1980:

CAGAGAGTTG TCGCTCATTA AACGCCACnT GATGAGTTTT CGCTTACGAA GTGCCACGCG 60
 GTATGGATAA TTTTCACCTG TTGCTGAGTC TTTGATAAGC CTCGACTGT 109

(2) INFORMATION FOR SEQ ID NO: 1981:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 55 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1981:

(2) INFORMATION FOR SEQ ID NO: 1982:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1982:

GAATCTGTTT AAGTTAGAAT TATCCCGGCA TAATGATAAA GGCGAGTAAA TGG 53

(2) INFORMATION FOR SEQ ID NO: 1983:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 252 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1983:

GnCTTTTGAA TAAAGAAAAA TTCATCAATA GAAAAACCGT CTTTATCGTC TATTTTTTTA 60
 ACTAGTAAGT TCGGCGTTCT TAGAGACTCA AATATTGATT TTACGTTTTT CTTTGTTACA 120
 CCACTAACAC TAAATATTCT TCCATCTAAA TCTACTAATT CTGGTACCGC AAAGACATCT 180
 AAACCATGTG TTTTTTCTTT GTATTATTT TCATCTTTTC CCAATAAAAA CACTTGGAAC 240
 TTTTGATTn GT 252

(2) INFORMATION FOR SEQ ID NO: 1984:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 63 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1984:

CGTGTTAATC AACTAATTCT TAGTTTTAAC TGTCGTAATA ATCAACTGAA CACTTTCAAT 60
 CTA 63

(2) INFORMATION FOR SEQ ID NO: 1985:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 63 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1985:

5 TCCTAAATG ACCGCTAATG CCTATGGATT GTTATCACCG ACCGCAGGGA CAGCAGACC 60
TAC 63

(2) INFORMATION FOR SEQ ID NO: 1986:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 112 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1986:

15 GGCAATATAAA AATTAGAGAA ATTATTTCAA ATGAACAGAT AGAGGCACAA GATGAATTAG 60
20 TTAAACGATT AAACGATTAT GntTTAAATG TCACTCAAGC AACTGTTTCT CG 112

(2) INFORMATION FOR SEQ ID NO: 1987:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 106 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1987:

30 TTTATCAATT TGTAACGAAC ATGAATTACA TGTTTCAGGA AAATATATTT CATCCCATTT 60
35 TTAAAAAGTA TAAGATTTTA TGAAAAATTA AACCAATTta GTATAA 106

(2) INFORMATION FOR SEQ ID NO: 1988:

(i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 400 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1988:

45 AATGGCGTAG TTACAGCATT TATGATTGTG TTAATCTTTT CTTCTGATAA ACATAATCTG 60
50 TTTGACCAAA AGTATTTAAG TGTTCAATTA ATTAGTTTAA TTATTTACGT CGTATGGCAA 120
GTTTTATTGA TAATGTTTTA TTATCATTCA AAACCAAAAA ATAATTCATT TTCAAAATTT 180

TGGTTAGGTG GACATCAGAT TCACTTCCAT GAAAGTAAAT TAATTGAATT TGTTGGTTTC 300
 TTAGGAATTT CTTATGTTAC ATTCAAAAGT GTGCAGTTAA TTATGGAAAT TCGTGATGGT 360
 5 TCTATCAAAG AAATTAAAGT ATGGAAATTA ATTCAATTTA 400

(2) INFORMATION FOR SEQ ID NO: 1989:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1989:

TTCAGCTTAC AATAATGAGC AGGTTGGGGT GGGCTCCAAC GCAGAGAATT TCGATAAGAA 60
 20 ATTCCACAAA TAATACAAGT TGGCCCACTC CCATTCTGTA ATAAATATAG GAGGTCATTG 120
 TTATGCAAAT AGAACTTACT GATGCAGCAG TAAC TTGGTT TAAAAATGAA CTTGAGTTGC 180
 CTGAAAATAA TAAAGTGCTC GTGTTTTTTG TAAGATATGG TGGCGAATTC CAACTCAAGC 240
 25 AAGGATTTAG TCCTGCTTTT ACAGTTGAAC CAAAGGAAGA TGTTGATATT GGCTATGAAC 300
 AACAAATATGA CGATTTAAAT GTTGTCGTAG CGGAAAAAGA TTTGTGGTAC TTTGAAGATG 360
 ACCACATTAT TGTAATGTA GTTGTCACGA AGATGAATTT 400

(2) INFORMATION FOR SEQ ID NO: 1990:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1990:

CAATTTATTA TGTAAC TAAT TATAGCATTG ATGAACAAGG CGCTCAACGT AATAATACAA 60
 TTAATGGATT GTTTCACAAG ATGGTAAAGC TAGGATGTCT TTTTATTAAG A 111

(2) INFORMATION FOR SEQ ID NO: 1991:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

TAAACAAATT CATCAATTGT TAGTGGCATA TCCTAATGTA ATTAGAGAGG AGTT

54

(2) INFORMATION FOR SEQ ID NO: 1992:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 59 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1992:

GAACGATAGA TTGATGAAAA GTTTAAAAAA GTACGTATAT GTTTATTAAG TTTGAGTTT

59

(2) INFORMATION FOR SEQ ID NO: 1993:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 73 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1993:

CGAGACCAAA ATATTGGAAC GAATAATTTC AGTGTTTTC TCCTTTATTA TAGATTCAAG
CTATGGATAA TAG

60

73

(2) INFORMATION FOR SEQ ID NO: 1994:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 50 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1994:

ATCCATACAA ATGTAACAAG CACAATTGCh GCCATACTTn GCATGACAGT

50

(2) INFORMATION FOR SEQ ID NO: 1995:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 57 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1995:

(2) INFORMATION FOR SEQ ID NO: 1996:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1996:

TCaTTTAaAa TTAATGTnCG TTGGGGCTCT AATAAAATTT GTTTACAACG

50

(2) INFORMATION FOR SEQ ID NO: 1997:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 61 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1997:

TCATGATTG AAATGACTTT CAATGACTTG GGTGGGACAC TTGTTGCACA GCTGGATGTG

60

C

61

(2) INFORMATION FOR SEQ ID NO: 1998:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1998:

CATGCATTGA TGnTCTCAAA GAACATGATG AAACAGGTCA nCACATGnCA

50

(2) INFORMATION FOR SEQ ID NO: 1999:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 52 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1999:

GGTTCGCTAC TGATTGGGTA TACATCTGAT TTAGCAATCT TGCGCACTTG TT

52

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2000:

ATGTGGTTAG ATATCTGCAC ACTTGAACGT TATTGTGGGA TATACTTGGC CAT 53

(2) INFORMATION FOR SEQ ID NO: 2001:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2001:

ATCTCAGTAA GGGTAAGCGT CAAAGTCTGC ACGGATGCTA ATGTTTACCA GGTT 54

(2) INFORMATION FOR SEQ ID NO: 2002:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2002:

CTAAAGATTG TAATGCTTGA ACAATTGGTT CAGTGAATTT TTGGAAATTG TGGAAACTGT 60
 TACCATCATC ATCTGTTATA AAACATAAGT TTAAATTGCC AGTATCATGA TAAACAGCGC 120
 CACCACCAGA AATTCTTCTT ACTACATCGA TGTGTGAGC ATCGATATAT GTCTGATTTA 180
 CTCCTCTAT CGTATTTTGA TTCTTTCCAA CAATGATAGA TGGTCTATTT ATGTAAAATA 240
 AAAAGTAACT TTCTTCTGCT GGTAATTTT TTAAACATA TTCTTCCATT GCTAAGTTTA 300
 AAGTTGGATC TGTAATATTA TTATTACTAA TGAATTTTCA TACAATCTCT CCCTTATATC 360
 TATATATATn CTCTACTTAT TTATGCCTTA ACTTTGCTCA 400

(2) INFORMATION FOR SEQ ID NO: 2003:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 57 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2003:

CCGAAATAGG ACGGGCAGTT GGATTTATTC GAAATGGGTG GCGTTAATAT ATACAGT

57

(2) INFORMATION FOR SEQ ID NO: 2004:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 112 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2004:

nAGTAGTTGA AGGCGACCGC GGTCCACAAG CTGCAAACGT TGTTAAACTA TAATTCCTAG

60

ATTTGAATCA TTGATTTTAA CTAACACCTT ACCAAGAAGT AAGGTGTTTT TA

112

(2) INFORMATION FOR SEQ ID NO: 2005:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2005:

AAATCTTGAC ATAGGCACAG GAATGTATAT TGATCTCGAT CACTTAAGTC

50

(2) INFORMATION FOR SEQ ID NO: 2006:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2006:

AAGGTGGGTT TAAATTTCCC AAAAAAAAAA GCCTTTTAAAC CTTTGGGGG GTCCCCCTTC

60

CTTGGAATTG GAAAGGGGCC AAAATTGGAA TAAGGGGnTT GGAAAAACCC AAGCC

115

(2) INFORMATION FOR SEQ ID NO: 2007:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 105 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2007:

TGAAGAAATA GCAATGAAC TCAATATTTTC TATTGAACGT CAATATTTCA ACCAATTATA 60
 5 TCGCTTCAAT AATCAAGATT TAAAGCATCT TGAACAAGAN TTTGA 105

(2) INFORMATION FOR SEQ ID NO: 2008:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 67 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2008:

ATTGGCTACT AAAGTTAAGG ACATGATGGA TTGGATTAGT GGTATGCGCT TTGAAAAGAT 60
 20 CAATTAT 67

(2) INFORMATION FOR SEQ ID NO: 2009:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 73 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2009:

TATAAATTAG CGTCCTTCAT ATCACAACGA TGATGCTCTG TGCGAAGATC TGATTTATTT 60
 30 CAATGTGCGC ACG 73

(2) INFORMATION FOR SEQ ID NO: 2010:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 51 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2010:

CTTTGTTTAT GTTTCGTTA ATTGTGAACC CTCTCTTTGG ATACCGAGGT T 51

(2) INFORMATION FOR SEQ ID NO: 2011:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 88 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2011:

TAACGACCAA GCTTAAAGAG ATACGCTCTT ATGCGATTGG ATAGGTCGTT AAAGTTAACT 60

10 ACAATACCTC ATAAGTAGAT TTAGAATC 88

(2) INFORMATION FOR SEQ ID NO: 2012:

(i) SEQUENCE CHARACTERISTICS:

15

(A) LENGTH: 56 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2012:

GTCAACCCCTT GCCAAGCTTA TATCAGGATA CTGGGATGTG ACTTCCGGTG AATTAC 56

(2) INFORMATION FOR SEQ ID NO: 2013:

25

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 400 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2013:

35 AGCTTATAGT ACTTGTGACT TCATAATGGA TGAAGTTGAA GTACCAAAAG AATTAACACA 60

ATTACACGAA TAATTTAAAT AGAGAGTGTG ATAGTAGGTG GAATTATTAA ATAGTTATAA 120

TTTTGTTTTA TTCGTATTAA CTCAAATGAT APTAATGTTT ACAATACCAG CTATAATTAG 180

40 TGGTATTAAG TACAGTAAAC TTGATTATTT TTTCATCATA GTAATTTCGA CATTATCGTT 240

ATTTCTATTT AAAATGTTTG ATAGCGCGTC CTTAATCATA TTAAC TTCAT TTATTATTAT 300

AATGnATTTT GTCAAAATCA AATGGnATTG nATTTTGTG ATTATGGCTT CGCAGATTAT 360

45 CCATACTGGT GCCAACTACA TGGATATAGT TATATATGCA 400

(2) INFORMATION FOR SEQ ID NO: 2014:

(i) SEQUENCE CHARACTERISTICS:

50

(A) LENGTH: 58 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2014:

5 TCTTTCGAGG ACAGTAGAGG GTCCACCCTA TTGGACGTGG TACTGTACTA CTTTAA 58

(2) INFORMATION FOR SEQ ID NO: 2015:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 55 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2015:

TCTACCTGCA GGCATTCAAG CTTGGCACTT GCCGTCTTTT TACAACGTCG TGACT 55

(2) INFORMATION FOR SEQ ID NO: 2016:

20 (i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 66 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2016:

30 TACTCTTAAG CTAACAACGG CGGTTATGAG TCCTTTGACA AGGTATCGGA GGAAAGACCG 60

TAAAGC 66

(2) INFORMATION FOR SEQ ID NO: 2017:

35 (i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 105 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2017:

45 CCAATAAGCA CACTGCCATT ATTGAGGACG GTACATnTAC GGTTAGACCC AATTGTTTCAT 60

GGCGGTGGGC ACATAGTGTT TGGCTTTGAG GAGGTTACCA TTGCC 105

(2) INFORMATION FOR SEQ ID NO: 2018:

50 (i) SEQUENCE CHARACTERISTICS:

- 55 (A) LENGTH: 58 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2018:

CCTTCCAATA GTAATTGATT GATGTATGAG TATATTAGGT GTGAAATCAA GAGGATTC

58

(2) INFORMATION FOR SEQ ID NO: 2019:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 52 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2019:

TTTCCTCGTA GGTGGTTCTT CTTCATCTTC GTTGTMTTGT CCGAAGTTTG GA

52

(2) INFORMATION FOR SEQ ID NO: 2020:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2020:

ATAGTTTAGG TGAGGATGTT GnGGTACGAC AGGAAGAAAG ACGGCAAACA

50

(2) INFORMATION FOR SEQ ID NO: 2021:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2021:

TTGTCACAAT AATTTCTTCA GGATCATAGG AAAAATGATA ACGATTTTTG AAGTATTGAC

60

TAATTGCTTC GCGAGTTTCT AATAACCCTT TATTGTGAGA GTATGATGTC TTGTCATTGT

120

TAATAGCATC AATATATGCC TTTTTCACAA CATCAGGCAT CCGGAAGTCT GGTGGCCAA

180

TAGTTAAATT AACACAATCA TCCAAATTAT TCATACGATT TGAAAATTGG CGATACTTGG

240

GTGGCTCCTA AAATAATTAG GAAATGAGGA nTTnAAGGAA GGTTCATT TnGTGGACAC

300

(2) INFORMATION FOR SEQ ID NO: 2022:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2022:

TCATCCAAAT TATTCATACG ATTTGAAAAT TGGCGAATAC TTGGTGCTCT TAAATATTTA	60
GAATTAGAAT TTAAAGAAAG TTTCATTGTG GACACCTCAA ATATAAATCA AATATTGTCT	120
AAAAATTTAG AAATTAATAA TATCATAACA TACTTTTAAA GCAAAAAAGG GTAAATTACT	180
TAAGCTTTAT TTGAAAAACG AAAAATGTCT AAATACACTG TAGTAACTAC TTTTCAAAAT	240
GAATAAAGTG GTTACAGTTA ATGTACTTAG ACAGTATAAA ATTATGAATC TTTAAACTGT	300
GATGGTCTTT GTAAATTAAT TATTGGATTT GTCCATTAC AAACAAAGTT TGTAGATAAT	360
ACATATACGA TGATTACAGA TATACTTATT AAATAAAGAT	400

20

(2) INFORMATION FOR SEQ ID NO: 2023:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 50 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

25

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2023:

TTTAAATATA CCAATCACGT TCATCCACAG TGATCCTAGA CCAATCCAGA	50
--	----

(2) INFORMATION FOR SEQ ID NO: 2024:

35

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 66 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2024:

TTTTTAATGG TTTAAAAATT CCCTAATAAA ATTTTGAAA ACCTAAATTC CAAGGGGTTA	60
AATTCC	66

(2) INFORMATION FOR SEQ ID NO: 2025:

50

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 64 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2025:

5 GTAAGAGCAA TGGCGCAAAA TGCCTGTAAT GATATTGTGA ACGTAATTGA ATCAGTAGAG 60

GACC 64

(2) INFORMATION FOR SEQ ID NO: 2026:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2026:

15 CTGTCGCTGC GTGACTTAAT TCTTTTGCCC CGTTGGCATA TGAGGAAATG TCA 53

(2) INFORMATION FOR SEQ ID NO: 2027:

(i) SEQUENCE CHARACTERISTICS:

- 20 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2027:

25 CATTTCACTA TTATTGGTTT AGGGTTGTTC ACGTTCATCA TGACCGCACC ACA 53

(2) INFORMATION FOR SEQ ID NO: 2028:

(i) SEQUENCE CHARACTERISTICS:

- 30 (A) LENGTH: 73 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2028:

35 CAACTAGACA TAGTATTGCT GCATTAATCA AGTCAAGCTG CCACACTAAG AATCGATGCA 60

40 AACGGAATCG TCA 73

(2) INFORMATION FOR SEQ ID NO: 2029:

(i) SEQUENCE CHARACTERISTICS:

- 45 (A) LENGTH: 127 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2029:

AATAATAATT CTGGAATAGT GTTTAATACT TATTnTCCGT TTAAGATTTT AACTTAATAT 60
 5 GGTITACAGC GCGTAGCTCG TCTAATTCAT CATCACGTGT AGAGTGCTCT GCCTTATCAG 120
 ATCAGTT 127

(2) INFORMATION FOR SEQ ID NO: 2030:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 61 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2030:

GCAAGTGAAT TGAAGTGACA TGTGGCTGGT GCTTCATGGT AATGATAAAC CAACACCATG 60
 G 61

(2) INFORMATION FOR SEQ ID NO: 2031:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 78 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2031:

ATAAATATCT AITTAGATAT AAGTATTGAT AAGTTGCTTG AATTTATAAA GTGAAGGAGT 60
 35 AGGTGTCATT AGTATAGT 78

(2) INFORMATION FOR SEQ ID NO: 2032:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2032:

GAATAGTGTT TATAAAATGT TGACACTGTA GTGGCATATT GTAAATTAAA TATTATTATG 60
 50 TGATCATTTT GTTTAAATAT TAGTTATAAG AAGTGAAATA nTCATTTTAA AAGGAGACTT 120
 AAAACTTGAA ACGATCAACG AATCAAGAAA AATTTCTTGA TACACTAATT AGACTTAATA 180

(2) INFORMATION FOR SEQ ID NO: 2033:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 57 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2033:

TTTTGTCATC TGTATAGGTA TCGCGCCGG TGTCTTTATT CACTTTGAAC TGTGCGT 57

(2) INFORMATION FOR SEQ ID NO: 2034:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 62 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2034:

AAGGCATTGG ATATAAGACT TGATGTTGCA TGGCAATCAC ACTGCCTAAT CCTTGCATAT 60

AA 62

(2) INFORMATION FOR SEQ ID NO: 2035:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 52 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2035:

ATGGCAAATA CTATACATCG TCCAATTGAT TGAAAAATAT GGTTATTAAA GA 52

(2) INFORMATION FOR SEQ ID NO: 2036:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 86 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2036:

AAGGTGTTTT TATATGCTTA TTACAAATAC TTAACGCGAT GAGTTTCTCA ACCAAATTGA 60

(2) INFORMATION FOR SEQ ID NO: 2037:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 71 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2037:

TACCCACCCC CAAACCCAAG GTTTTAAAAA ACCCCTTCCA AAAGCCCGGA AAAACCAAAA 60
 GGAATTATTT T 71

(2) INFORMATION FOR SEQ ID NO: 2038:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2038:

GAATCCCGGA AGTACAATTT GGTACGTGAA GAAAATGGTA GTGGAATTAC 50

(2) INFORMATION FOR SEQ ID NO: 2039:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2039:

CAGTATCTCT TGGTATTTTA ATTGGTGCTT TATTAAACGT AATTTTACCT TTATATATCG 60
 ATGGAGCGAA GAGTATTTTC GTATACGTTT ATAGTGCCTC TATTTTACCA GGTATGATTC 120
 CTGGGTTTAT GATTTTATTC AGTCATTTAC GTTTTAGAAA ATTACACCCT GAAGAATTGG 180
 AAGGTCACCC ATTCAAATG CCTGGTGGCG CAGTAACTAA CTATTTAACA ATCTTATTCT 240
 TAATATTAGT ATTGGTTGGT ATGGTATTTA ATGTTGAAAC TAGAATATCA GTGCTTATTG 300
 GTGTCATCTT CTTAACGATT GTAACGATTT ATTATTTTAT TAGATATAAT AAAAnTAATG 360
 TAAAGCAnAA TAGTATGTTA TAAAGAGCGn TACTTATGAC 400

(2) INFORMATION FOR SEQ ID NO: 2040:

(A) LENGTH: 79 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2040:

10 AAGCTGATTT TTCTAAATGT TGAAAATCAT AAAGTCTTA ATAATAAATA ACGAGATCTA 60
 AGTAATAGTG CTCCATTAA 79

(2) INFORMATION FOR SEQ ID NO: 2041:

15

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2041:

25 AATTGAACGG ATCGTTCCCA ACCGTTATCA ACCCAGACCG GTGTTTGAAC CCAA 54

(2) INFORMATION FOR SEQ ID NO: 2042:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2042:

AATGGGATTG GTTCAAAGTG AAATGGGCTG TTAGTCCCTG TAAAACCAAG 50

(2) INFORMATION FOR SEQ ID NO: 2043:

40

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 109 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2043:

50 ATTGGNATAA TCAAAGCATT GAATCATACA TAGTCACATT GATTGTTTCC TCAGAGTTTC 60
 AACACTCTAT AACTCATTTT AGTAATTTCG TGATTGCGCA CTTTCATGTG 109

(2) INFORMATION FOR SEQ ID NO: 2044:

55

- (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2044:

10 TTTTATGGAG GTGATGAAGT GGGTGAAGCT GAAAGGAAGC AAAAGCTTGG 50

(2) INFORMATION FOR SEQ ID NO: 2045:

(i) SEQUENCE CHARACTERISTICS:

15

- (A) LENGTH: 101 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2045:

TTGGCCCCCT TCCAACCCCTT GGAAATTTTA AAAGGCCANT TTGGGGTAA AACCCCTGGT 60

25

TCCAAGGACC CCCAAAAGTT TTTAACCTT CCAATTATTA T 101

(2) INFORMATION FOR SEQ ID NO: 2046:

(i) SEQUENCE CHARACTERISTICS:

30

- (A) LENGTH: 100 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2046:

ACCCTTTCCA AAAAGCCCAT TTTGAATTCC CCAAAGGGAG CCAAATTTAA GATGGCCGCh 60

40

AAAAAGGACC GGGGGGTCCA TGTTTAAATT TAAGCCGGAC 100

(2) INFORMATION FOR SEQ ID NO: 2047:

(i) SEQUENCE CHARACTERISTICS:

45

- (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2047:

GTTAGTTATG AGCAACGTAT TAATGAAATT ATTGAGCAGT AATTnACCAG 50

(2) INFORMATION FOR SEQ ID NO: 2048:

55